

J. E. CONDUCT & A. J. DOTY.
Fire Extinguishing Apparatus.

No. 209,660.

Patented Nov. 5, 1878.

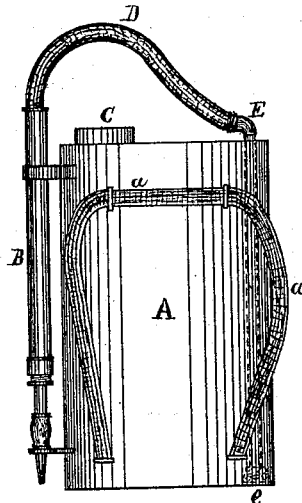


Fig. 1.



Fig. 2.

Witnesses.

George S. Newell
James E. Clark

Inventors

J. Elliot Condict
A. J. Doty

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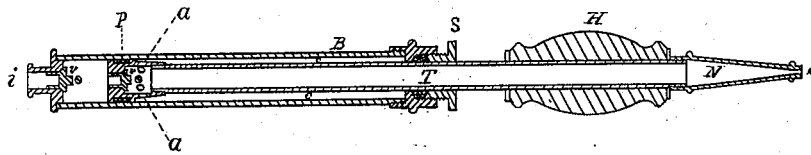


Fig. 3.

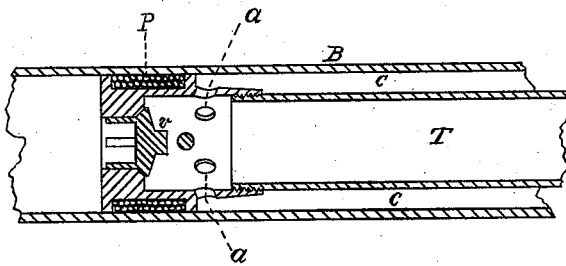


Fig. 4.

Witnesses,

George P. Newell
James E. Clark

Inventors

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UNITED STATES PATENT OFFICE.

J. ELLIOT CONDUCT AND ALBERT J. DOTY, OF PHILADELPHIA, PENNSYLVANIA; SAID DOTY ASSIGNOR TO SAID CONDUCT.

IMPROVEMENT IN FIRE-EXTINGUISHING APPARATUS.

Specification forming part of Letters Patent No. **209,660**, dated November 5, 1878; application filed April 12, 1878.

To all whom it may concern:

Be it known that we, JOHN ELLIOT CONDUCT and ALBERT J. DOTY, both of the city of Philadelphia and State of Pennsylvania, have invented certain Improvements in Apparatus for Extinguishing Fires, of which the following is a specification:

This invention pertains to the art of extinguishing fires by means of a portable or stationary tank filled with water, or a mixture of water and a chemical compound, and using a small pump, which pump is worked from the end of the hose instead of at the tank, as in the Johnson and other pumps of like character.

In the drawing, Figure 1, A is a vessel of any suitable size and material, preferably, for portable purposes, of a capacity of about five gallons. B is a small hand-pump placed on the end of the hose, and when not in use may be held to vessel A by straps, as shown in drawings. C is an opening for introducing water or any liquid that may be desired. D is a hose fastened to pipe E, said pipe running to bottom of vessel A and terminating in strainer *e*. *a* are straps for carrying the vessel on the back, as shown in Fig. 2. A handle may also be placed on the top for carrying by the hand, as an ordinary bucket.

Fig. 2 shows the manner of using, the vessel being placed on the back, and the pump worked by hand. The vessel may be placed on the ground, or in large stationary tanks in any suitable part of a building, and the hose made long enough to work on any floor, using the pump from the end of the hose, as previously described. The advantages of the use of the pump in this way are allowing one person to work it and permitting a much nearer access to the fire than when the pump is attached to the tank.

In Fig. 3, B is the barrel of the pump; P, the plunger, packed at *s*; *v v* valves; *i*, inlet for water or hose connections; *c*, annular space

between outside of hollow plunger-rod and inside of barrel; H, handle; N, nozzle; *o*, outlet of nozzle; *a a*, holes for opening communication between hollow plunger-rod T and annular space *c*.

Fig. 4 is an enlarged sectional view of plunger, with valve, and part of barrel and plunger-rod.

The same letters refer to similar parts.

The operation and manner of using are as follows: The barrel of the pump is taken in one hand and the handle in the other. When the handle is pulled out, water enters at *i* and through lower valve and fills all under the plunger until it arrives at the end of the stroke, as in any ordinary pump. On the return stroke a portion of this water passes out through hollow plunger T and nozzle N, the remainder passing through the holes *a* and filling the annular space *c*. On the outward stroke again this water from the annular space *c* is forced back through holes *a* and out of hollow plunger-rod T and nozzle N. At the same time water enters at *i*, filling the barrels for another stroke.

By making the areas of hollow plunger T and annular space *c* about equal a constant stream may be maintained.

We therefore claim, and desire to secure by Letters Patent, as follows:

The combination of extinguisher A with the hand-pump B, said pump being located at the end of the discharging-hose D, constructed as shown and described, and for the purpose set forth.

In testimony whereof we have signed our names in the city of Philadelphia, April 1, 1878.

J. ELLIOT CONDUCT.
ALBERT J. DOTY.

In presence of—

GEORGE S. T. NEWELL,
JAMES E. CLARK.