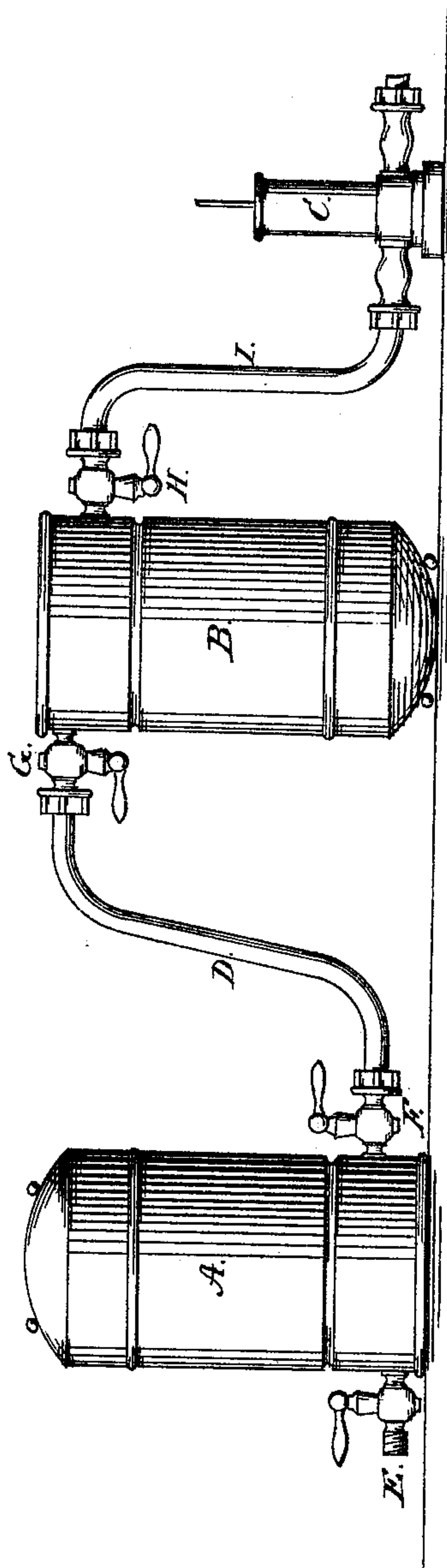


A. A. MURPHY
FIRE EXTINGUISHER.

No. 180,782.

Patented Aug. 8, 1876.



Witnesses;
J. W. Howard
R. Foster.

Inventor:
Alexander Allen Murphy.
by Geo. A. Sawyer.
Attorney.

UNITED STATES PATENT OFFICE.

ALEXANDER A. MURPHY, OF MONTREAL, QUEBEC, CANADA.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **180,782**, dated August 8, 1876; application filed June 1, 1876.

To all whom it may concern:

Be it known that I, ALEXANDER ALLEN MURPHY, of the city of Montreal, in the district of Montreal, Province of Quebec, and Dominion of Canada, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of the specification.

This invention is an improvement upon Patent No. 163,328, granted to Alexander Allen Murphy and Charles Coppin Hearle, dated May 18, 1875, for an improvement in pneumatic fire-extinguishers.

In the drawing, the figure represents two hollow metallic cylindrical vessels, each being provided with two cocks.

The shape of the vessels is immaterial; but they should be so constructed as to readily stand on either end, or one or both may be suspended upon pivots or trunnions, so that its position may be reversed when necessary.

The action of this invention is as follows: The vessels being arranged as shown in the drawing, the ends of the hose D are fastened to the cocks F and G, and one end of the hose I fastened to the cock H, and the other end to the pump C, or other hydraulic force. The cock E being then closed and all the others open, water is forced into the vessel B until it is filled, the air therefrom being driven through the hose D into the vessel A, which will then contain two charges of air, when it is confined by closing the cock F. The vessel B is

then placed upon its base, and the water discharged from it by detaching the hose and opening the cock; or a separate cock may be provided for that purpose, to save the time and trouble in unscrewing the hose. The hose being again attached to its cock, and the vessels A and B remaining upon their bases, the cocks F and G are opened, and the pressure of air will become equalized in both vessels, each of which will contain a measure and a half. Water may then be forced into both vessels until each is about four-fifths full, or until the pressure reaches one hundred pounds to the square inch. A hose and nozzle may then be attached, and the two or twin extinguishers are ready for separate or combined use.

In discharging any of the extinguishers, care should be taken to prevent the escape of the compressed air after all the water is exhausted. The extinguisher may then be filled by simply forcing in one charge of water.

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

The compressed-air fire-extinguisher hereinbefore described, consisting of two or more reversible vessels, connected by flexible tubes or hose and stop-cocks on each side of said vessels, so arranged that water may be forced into said vessels to compress the air therein.

In testimony that I claim the foregoing as my own invention I affix my signature in the presence of two witnesses.

ALEXANDER ALLEN MURPHY.

Witnesses:

HENRY FRANCIS QUELCH,
ARTHUR HITCHINGS CHAMBERS.