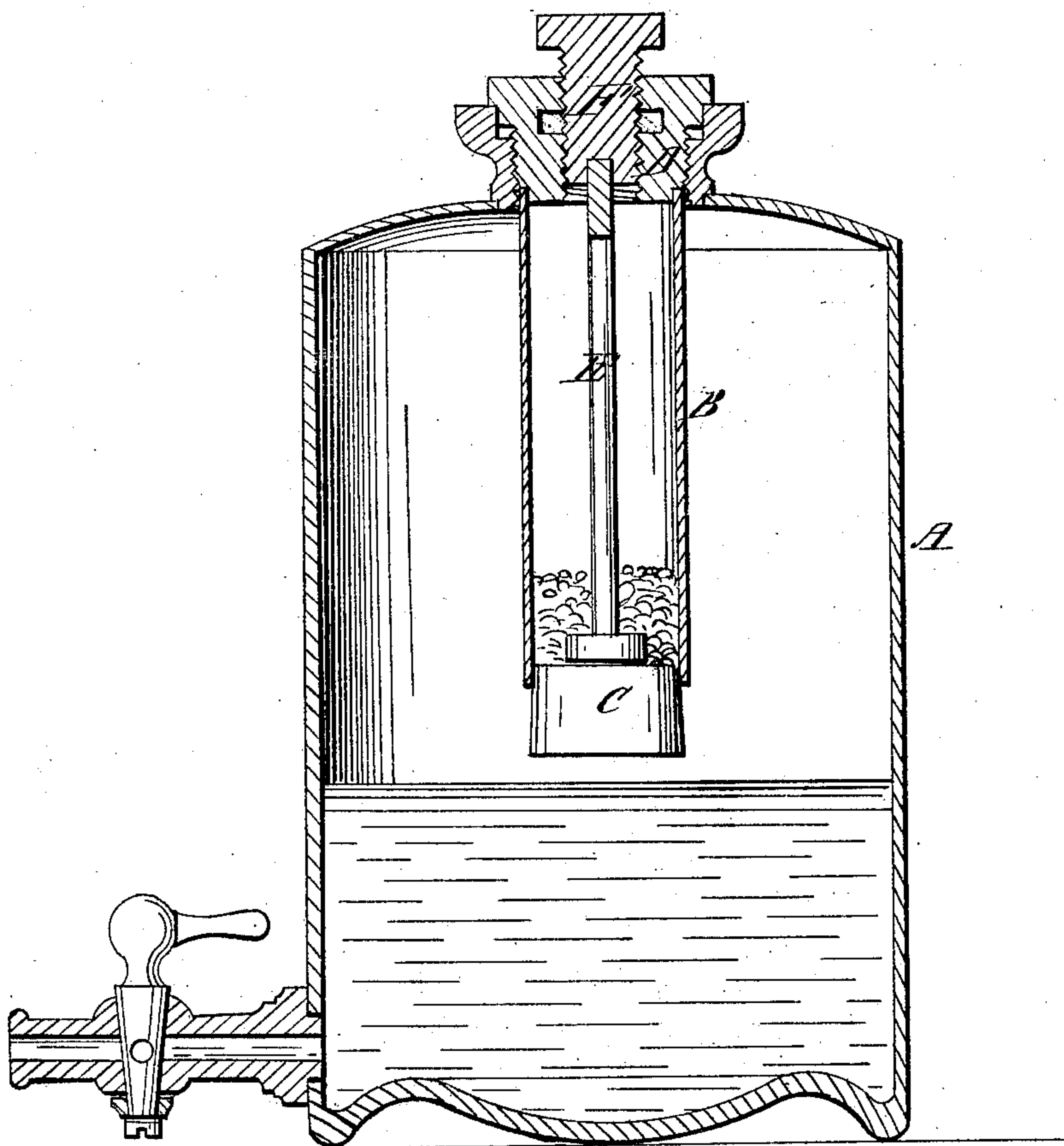


J. R. Laurent,

Fire Annihilator,

Nº 59,847,

Patented Nov. 20, 1866.



Witnesses
Theo Fusch
J. A. Service

Inventor
Gas R. Laurent
Per Munn & Co
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES R. LAURENT, OF MILFORD, PENNSYLVANIA.

IMPROVEMENT IN EXTINGUISHING FIRES.

Specification forming part of Letters Patent No. 59,847, dated November 20, 1866.

To all whom it may concern:

Be it known that I, JAMES R. LAURENT, of Milford, in the county of Pike and State of Pennsylvania, have invented a new and Improved Fire-Annihilator; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a vertical central section of this invention.

This fire-annihilator belongs to that class in which water or other liquid is thrown out through a suitable hose or nozzle by the force of gas generated in a vessel which also incloses the water or other liquid used in extinguishing the fire.

A represents a vessel, which is partly filled with water, and then equal parts of common salt and bicarbonate of soda are added and allowed to dissolve in the water.

Through the top of the vessel A extends a tube, B, which is closed at the bottom by a stopper, C, of cork or other suitable material, and the top by a screw-plug, D. Through this screw-plug extends a rod, E, which is secured in a screw, F, and extends close down to the stopper C, so that by turning the screw F the stopper can be forced out of the tube B.

Into the tube B is placed a quantity of alum, ($^3\text{SO}_3, \text{Al}_2\text{O}_3 + \text{SO}_3\text{KO}$), and if a fire occurs, or

whenever it is desired to use the annihilator, the stopper C is pushed out and the alum allowed to discharge into the water containing salt and bicarbonate of soda. As soon as the alum mingles with the solution of bicarbonate of soda, a quantity of carbonic-acid gas is evolved, and a pressure is created by this gas in the vessel A, whereby the liquid contained therein can be thrown to a considerable height or distance. A faucet, G, serves to discharge the liquid, and this faucet may be so arranged that a hose can be attached to it with ease and facility.

The principal advantage of my apparatus is derived from the solution of salt, carbonate of soda, and alum, which is thrown on the flames, and which has the property to extinguish the flames more readily than pure water.

I do not claim as my invention the vessel A, or anything in the construction of the vessel; but

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

The solution of bicarbonate of soda and common salt in combination with alum, applied and operating substantially as and for the purpose set forth.

The above specification of my invention signed by me this 21st day of June, 1866.

JAS. R. LAURENT.

Witnesses:

G. P. HELLER,
H. S. MOTT.