

(No Model.)

T. G. TURNER.
CHEMICAL FIRE EXTINGUISHER.

No. 357,161.

Patented Feb. 1, 1887.

Fig. 2.

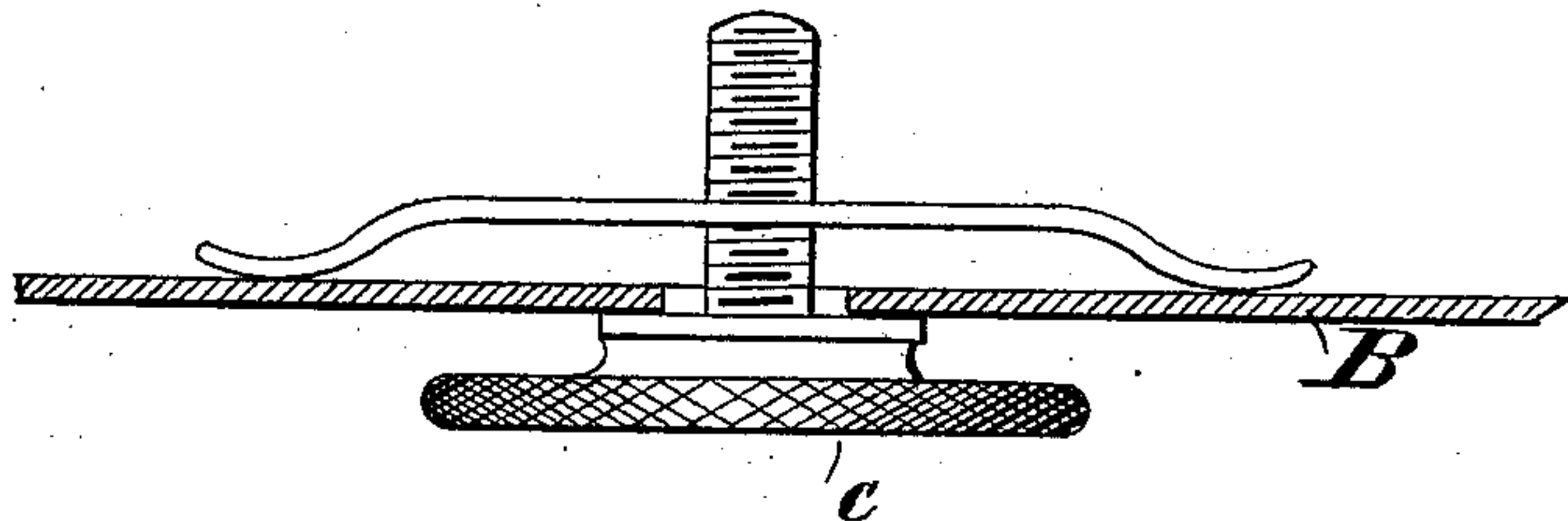
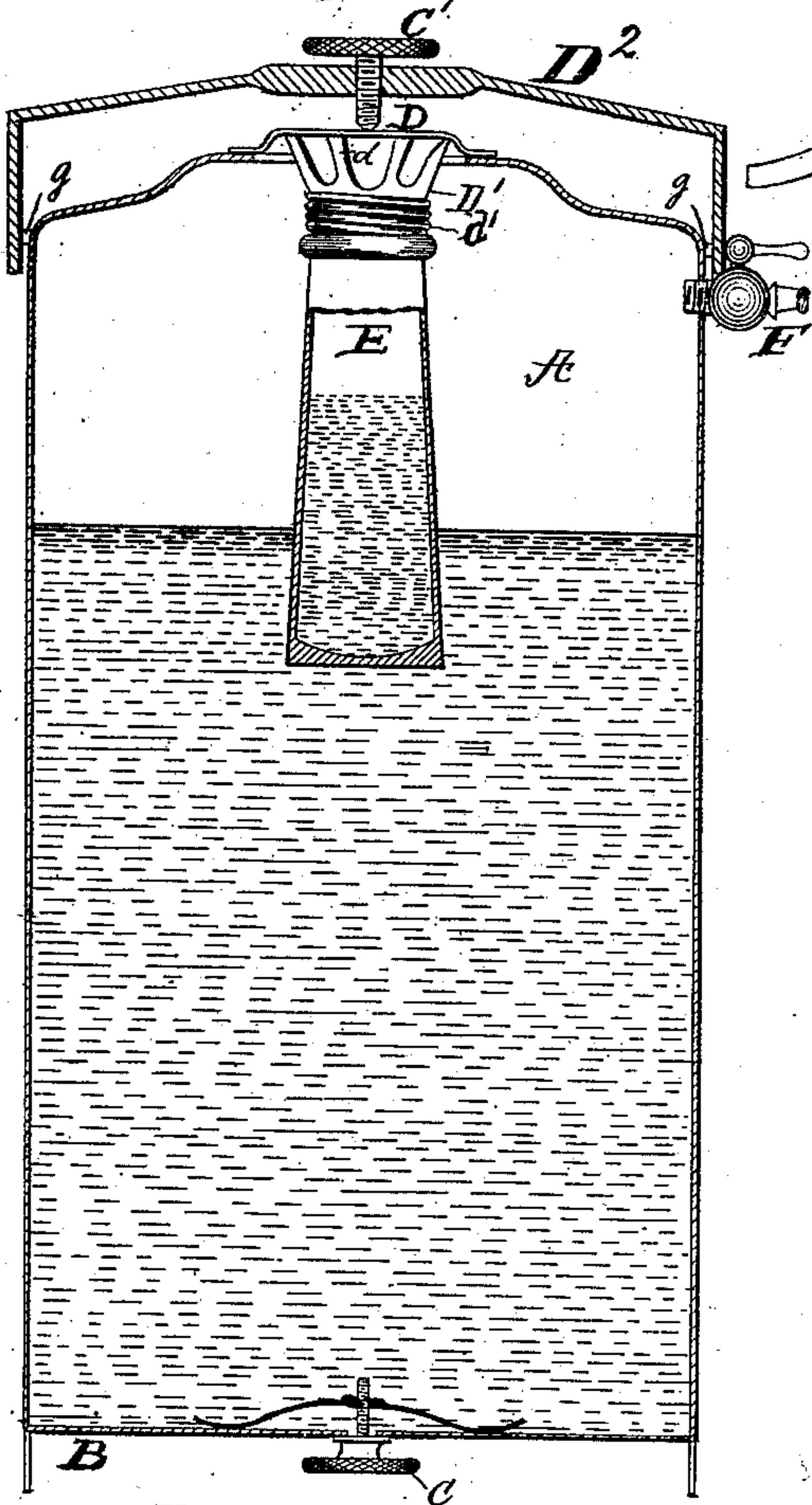


Fig. 1.



WITNESSES:

W. Colborne Brookes
James M. Pully.

Fig. 3.

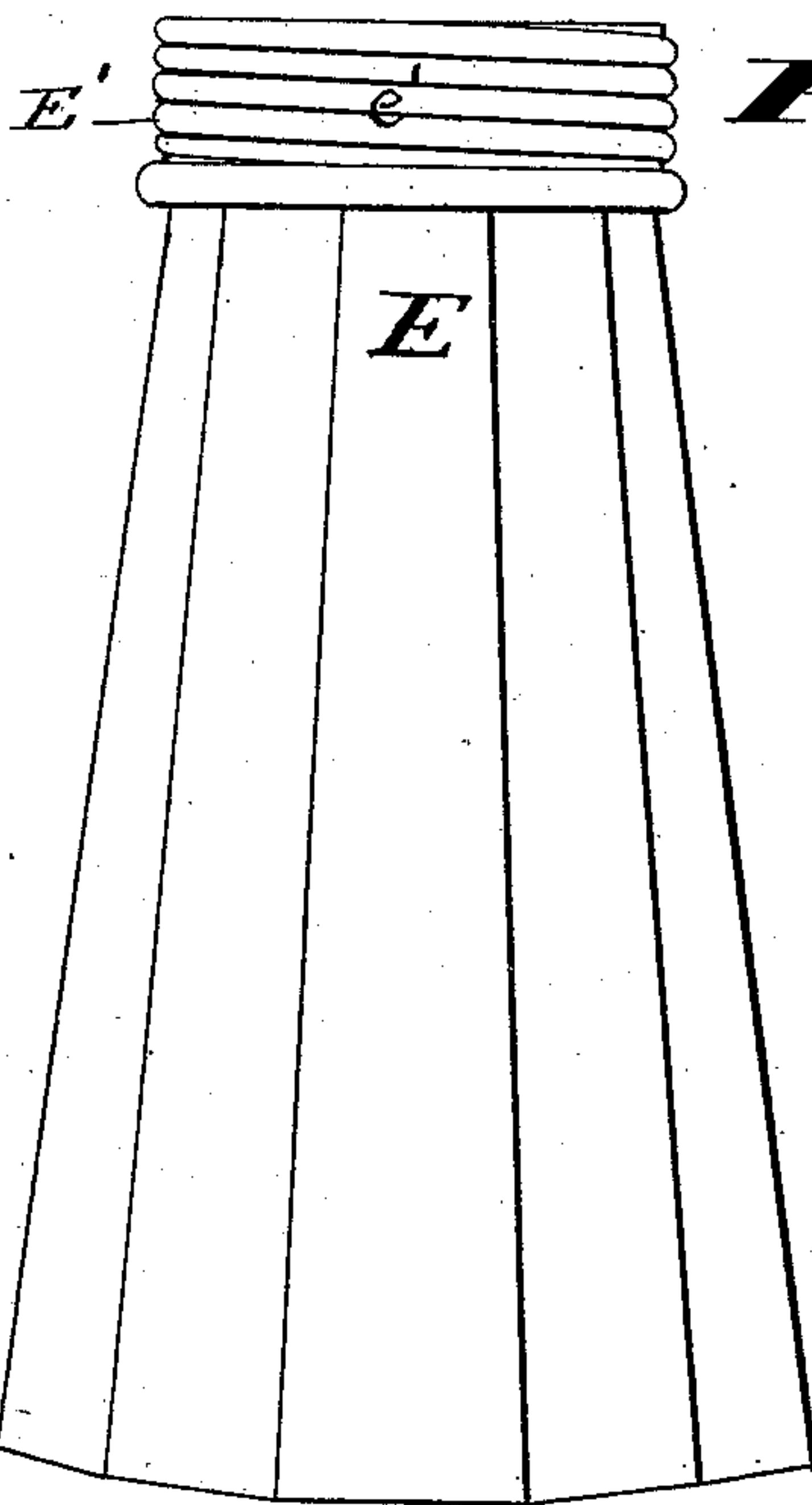
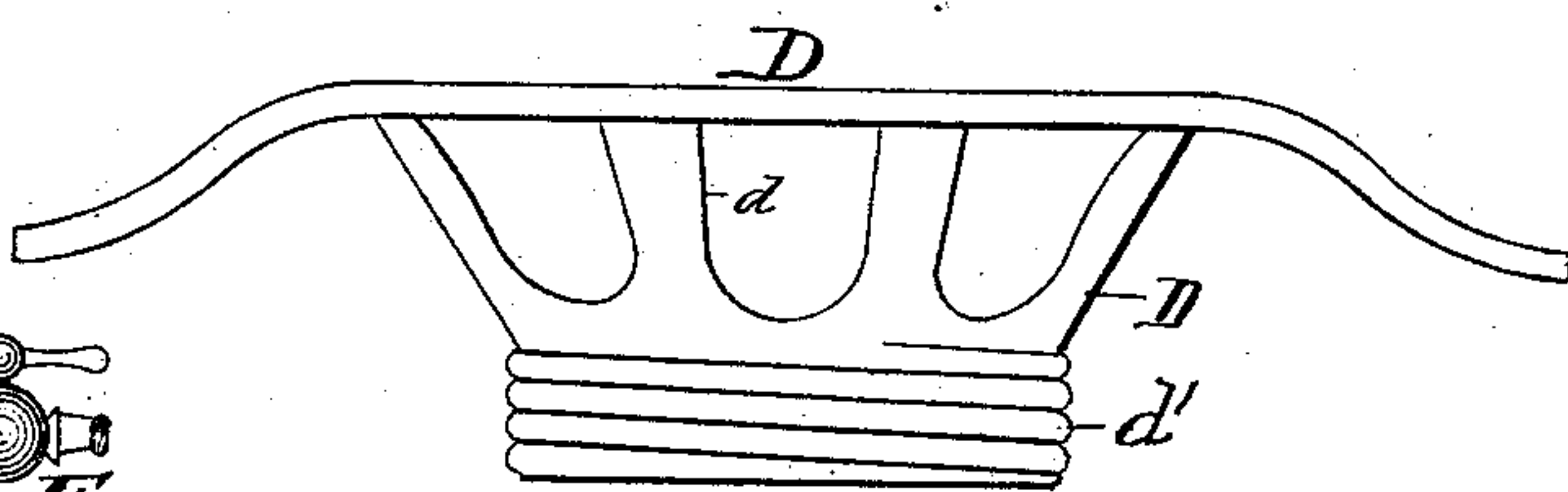


Fig. 4.

INVENTOR

Thomas Gilpin Turner

BY

George Hasettine

ATTORNEY.

UNITED STATES PATENT OFFICE.

THOMAS GILPIN TURNER, OF NEW YORK, N. Y., ASSIGNOR TO THE HOUSEHOLD FIRE EXTINGUISHER COMPANY, OF NEW JERSEY.

CHEMICAL FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 357,161, dated February 1, 1887.

Application filed July 24, 1886. Serial No. 208,910. (No model.)

To all whom it may concern:

Be it known that I, THOMAS GILPIN TURNER, a citizen of the United States, residing at New York city, in the county and State of New York, have invented new and useful Improvements in Chemical Fire - Extinguishers, of which the following is a specification.

The extinguisher consists of a vessel having an outer and an inner chamber. One chamber contains an alkali and the other an acid. The inner vessel is so constructed that when the device is inverted the contents of the inner and outer vessel shall be caused to commingle one with the other. The result of this mixture is a gas-pressure produced in the outer or main chamber. The pressure thus obtained is employed to eject the fluid contents of the outer chamber by way of a suitably-formed vent. I prefer to suspend the inner chamber from a removable cap or cover of the outer chamber by means of a perforated thimble or socket, into which it screws or locks. The cap or cover carrying the inner chamber I prefer to be applied to the outer chamber by a screw passing through a strap whose extremities engage with lugs on the outside of the outer vessel. The inner chamber is not closed, except by the outer covering of the external chamber.

When the device is inverted, the contents of the inner chamber will be discharged into the outer chamber by means of the openings in the thimble.

A spring safety-valve is supplied in the bottom of the device, so that when the extinguisher is inverted any dangerous excess of gas will automatically escape. The pressure at which the safety-valve shall act can be regulated as desired.

The accompanying drawings form part of this specification, and illustrate what I consider the best means of carrying out my invention.

Figure 1 is a vertical section. Fig. 2 is a side view of the cover of the main chamber and the thimble supporting the inner chamber. Fig. 3 is a side view of the inner chamber. Fig. 4 is a detail view of the safety-valve on a larger scale.

In each of the views similar letters of reference are employed to indicate corresponding parts wherever they occur.

A represents the main chamber; B, the bottom thereof, which is provided with a safety-valve, C.

D is the cap or cover, which supports on its under side the inner chamber, E. The inner chamber, E, is connected to the cap or cover D by means of a thimble, D', which is provided with openings *d*, and with a screw-thread, *d'*, adapted to engage with a screw-thread, *e'*, formed on the upper end of the head E' of the inner chamber, E.

F is a vent for the discharge of the liquid from the chamber A after the device has been inverted, the contents of the chamber E mixed with the contents of the chamber A, and the necessary gaseous pressure created.

C is an automatic screw safety-valve adapted to prevent the explosion of the device in the event of a too great gaseous pressure being generated within the chamber A on the inversion of the device preparatory to the opening of the vent F. The vent F may be of any suitable construction, but I prefer that shown by the drawings.

The cover D is retained in position by a screw-clamp, D², which is adapted to engage with lugs *g g*, formed on or affixed to the sides or periphery of the chamber A.

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

A chemical fire-extinguisher having an outer metallic vessel and inner glass vessel, a perforated cap having a flange for supporting the inner vessel upon the outer, and a screw-neck for securing it to the glass vessel, and a handle for the extinguisher provided with a set-screw for securing the perforated cap in place, substantially as shown and described.

In witness whereof I have hereunto set my hand this 23d day of July, 1886.

THOS. GILPIN TURNER.

Witnesses:

JAMES M. TULLY,
W. H. GRAY.