

No. 686,183.

Patented Nov. 5, 1901.

F. YOST.

FIRE EXTINGUISHER.

(Application filed May 22, 1899. Renewed Aug. 9, 1901.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

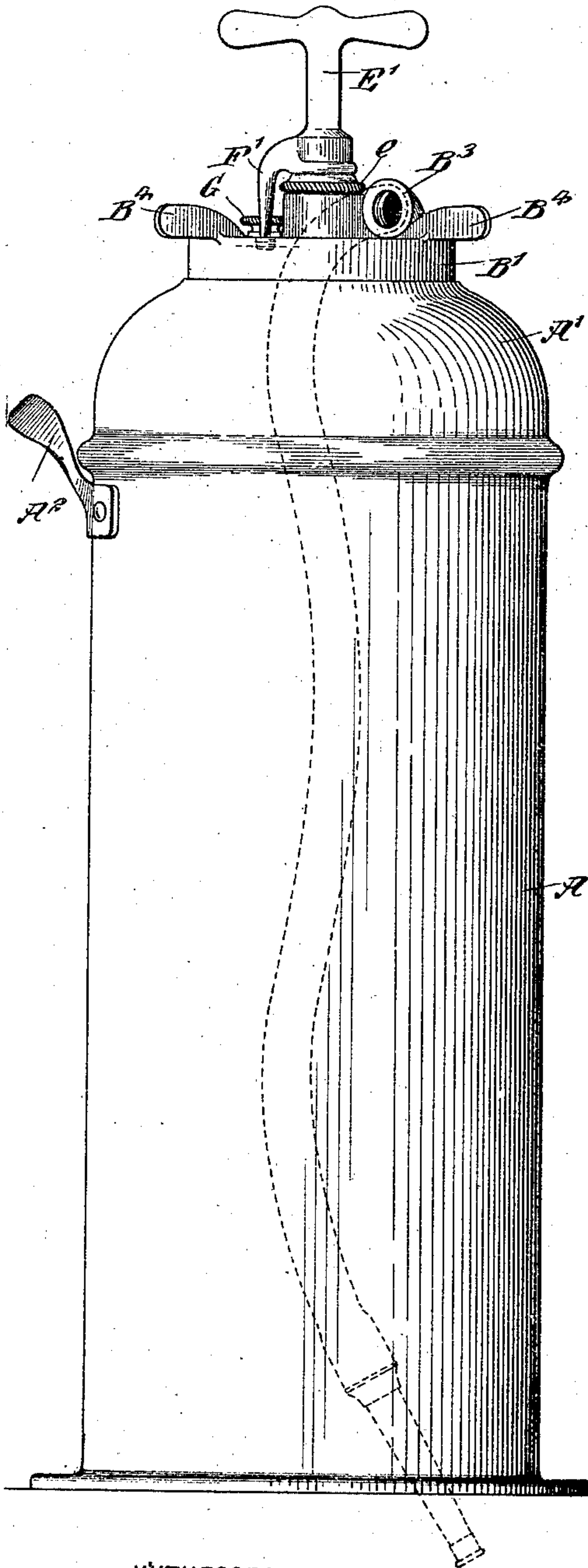
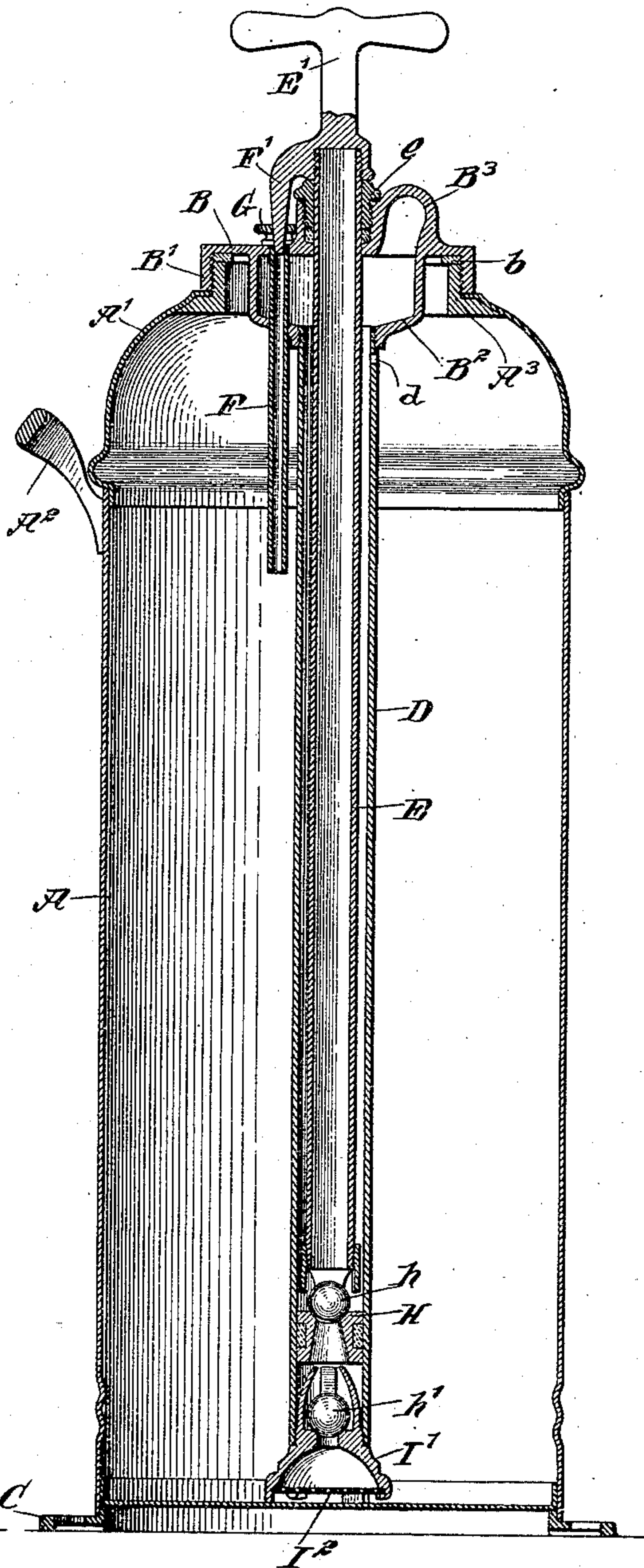


Fig. 2.



WITNESSES:

W. Smith
H. L. Reynolds

INVENTOR

Fernando Yost
BY *Mundy*
ATTORNEYS

No. 686,183.

Patented Nov. 5, 1901.

F. YOST.
FIRE EXTINGUISHER.

(Application filed May 22, 1899. Renewed Aug. 9, 1901.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 3.

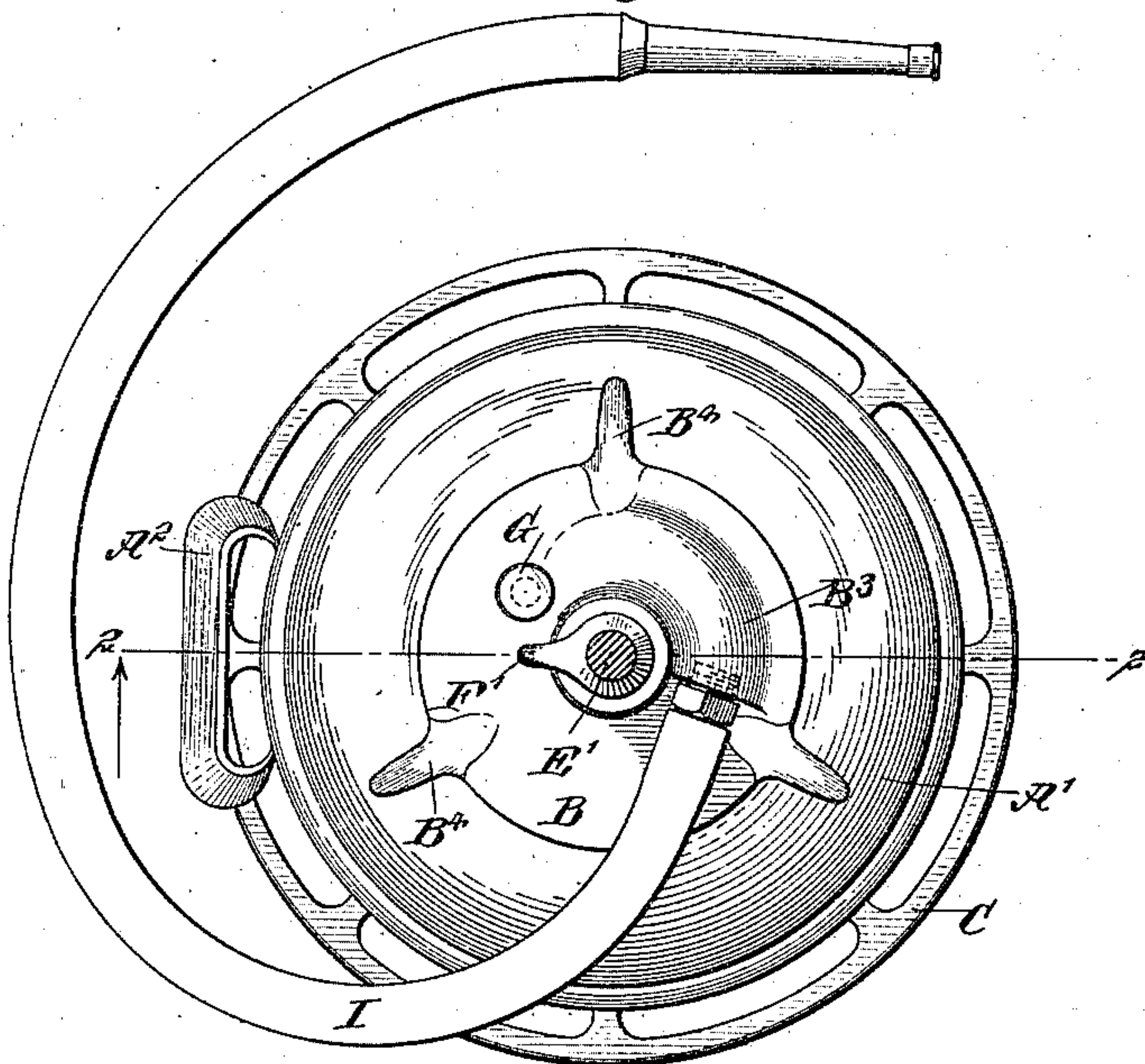
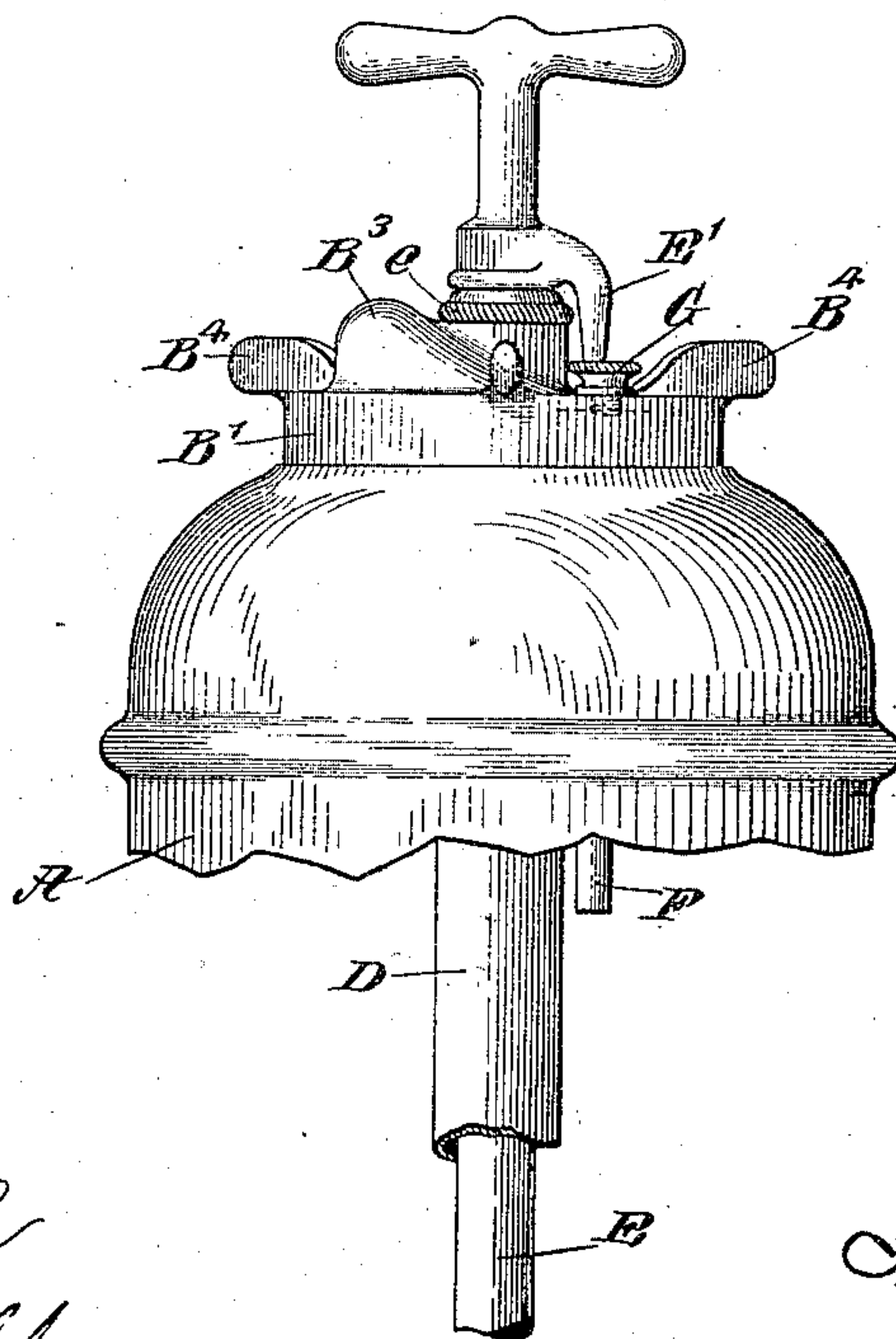


Fig. 4.



WITNESSES:

C. W. Smith
H. L. Reynolds

INVENTOR

Fernando Yost
BY *M. J. [Signature]*
ATTORNEYS

UNITED STATES PATENT OFFICE.

FERNANDO YOST, OF RUTHERFORD, NEW JERSEY, ASSIGNOR TO JAY W. WATKINS, OF NEW YORK, N. Y.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 686,183, dated November 5, 1901.

Application filed May 22, 1899. Renewed August 9, 1901. Serial No. 71,531. (No model.)

To all whom it may concern:

Be it known that I, FERNANDO YOST, of Rutherford, in the county of Bergen and State of New Jersey, have invented a new and Improved Fire-Extinguisher, of which the following is a full, clear, and exact description.

My invention relates to an improvement in hand fire-extinguishers, and comprises the novel features which are hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is an elevation of my device. Fig. 2 is a longitudinal sectional elevation thereof. Fig. 3 is a top plan view; and Fig. 4 is an elevation of the upper portion of my device, showing the remainder broken away or removed.

My invention pertains to that class of fire-extinguishers in which a reservoir or tank is provided of such a size that it may be conveniently carried to the fire, said reservoir being kept filled with a liquid, which may be plain water, but is usually a chemical solution, the device also having a pump and short hose attached thereto by which the liquid may be thrown to the point desired.

The reservoir A is provided with a flanged base C, said flange projecting a sufficient distance to enable the foot to be placed thereon and permit the device to be held firmly while the pump is being operated. The upper end of the tank or reservoir A is shown as provided with a domed top A', said top being provided with an opening adapted to receive the pump and its connected mechanisms. A collar A² is secured to the edge of this opening and is exteriorly threaded to receive the threads upon the cover B, having a depending flange B'. This cover is a casting which is provided with radial arms B⁴, by which it may be readily turned to secure it in place or to remove it, as desired. A tight joint is made between the collar A² and the cover by means of a packing-ring b, which is placed between the upper edge of the collar A² and the lower surface of the cover.

Depending from the upper surface of the cover is a chamber B², which is provided with

a hole in its under portion adapted to receive the upper end of a tube or pipe D, said tube forming the pump-cylinder. The lower end of this tube extends to near the bottom of the reservoir or tank A, so that substantially all the liquid may be pumped from the tank.

To the lower end of the tube D is secured a foot I', which is provided with a strainer I² in its under surface, through which liquid may enter the pump. This foot I' is also provided with a valve-seat, and a ball-valve h' is provided by which said valve-opening is closed. Within the tube D is a smaller tube E, which forms the piston-rod. To the lower end of this tube is connected the piston II, which is also provided with a ball-valve h.

The tube E extends upwardly through the cover B, and a packing-gland or stuffing-box is secured to the upper side thereof. On the upper side of the cover B is a hollow boss B³, which is threaded to receive one end of a pipe-coupling secured to the discharge pipe or hose I. This coupling is so placed that the hose extends horizontally when connected with the cover B. The cover is also provided with an opening which is normally closed by a screw-plug G, said opening being provided for filling the chamber B² with a sealing liquid, which will prevent evaporation of the liquid within the tank.

A vent-pipe F is provided, which extends from the upper surface of the cover B through the chamber B² and into the body of the tank or reservoir. This vent-opening is normally closed by means of an arm F', which is secured to the upper end of the piston-rod or tube E. This arm is preferably formed as a part of the handle E', which is secured to the upper end of the tube E. In its normal position the lower end of the arm F' enters the upper end of the tube F, thus effectually sealing the device, so as to prevent evaporation of the liquid.

In using my device when the piston is drawn upwardly it automatically opens the vent-pipe F and at the same time discharges the sealing liquid which had been placed in the chamber B². The next stroke of the pump will deliver the extinguishing liquid without any of said sealing liquid. At the same time the piston-rod E will be automatically lubri-

cated by the sealing fluid, which is of an oleaginous character. The reservoir is preferably provided with one or more handles A², by which it may be conveniently held while being carried about. When in use, the hose I is held by one hand and the pump operated by the other hand.

The pump-cylinder D is provided with a vent-opening *d* just below the cover, so that if the hose is dropped the liquid in the tank cannot siphon out.

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

15 1. A fire-extinguisher comprising a reservoir or tank having a single opening in its top and a cap provided with means for securing it to the reservoir and closing said opening, the cap having a depending cup-shaped
20 flange extending into the hole in the reservoir and forming a sealing-chamber, a tube depending from said flange and forming a pump-cylinder, the cap having a suitably-packed opening or gland in its top adapted to
25 receive a pump-plunger, a pump-plunger passing through said opening and entering the pump-cylinder, said cap having a hose attachment provided thereon, a vent-pipe passing through the sealing-chamber and communicating between the interior of the reservoir
30 and the top of the cap, and an arm carried by the pump-plunger and terminating in a plug adapted to enter said hole to close the vent-opening.

35 2. A fire-extinguisher comprising a reservoir or tank having a single opening in its top and a cap provided with means for securing it to the reservoir and closing said opening, the cap having a depending cup-shaped
40 flange extending into the hole in the reser-

voir and forming a sealing-chamber, a tube depending from said flange and forming a pump-cylinder, the cap having a suitably-packed opening or gland in its top adapted to receive a pump-plunger, a pump-plunger
45 passing through said opening and entering the pump-cylinder, said cap having a hose attachment provided thereon and consisting of an upwardly inclined and curved hollow rib partially surrounding the pump-gland
50 and terminating in a vertical face which is threaded to receive a hose attachment.

3. A fire-extinguisher comprising a reservoir or tank having a single opening in its top and a cap provided with means for securing it to the reservoir and closing said opening, the cap having a depending cup-shaped
55 flange extending into the hole in the reservoir and forming a sealing-chamber, a tube depending from said flange and forming a pump-cylinder, the cap having a suitably-packed opening or gland in its top adapted to receive a pump-plunger, a pump-plunger
60 passing through said opening and entering the pump-cylinder, said cap having a hose attachment provided thereon and consisting of an upwardly inclined and curved hollow rib partially surrounding the pump-gland
65 and terminating in a vertical face which is threaded to receive a hose attachment, a vent-pipe passing through the sealing-chamber and communicating between the interior of the reservoir and the top of the cap, and an
70 arm carried by the pump-plunger terminating in a plug adapted to enter said hole to close the vent-opening.

FERNANDO YOST.

Witnesses:

H. L. REYNOLDS,
F. W. HANAFORD.