

J. B. VAN DYNE.
Fire-Extinguishers.

No. 157,040.

Patented Nov. 17, 1874.

Fig. 1.

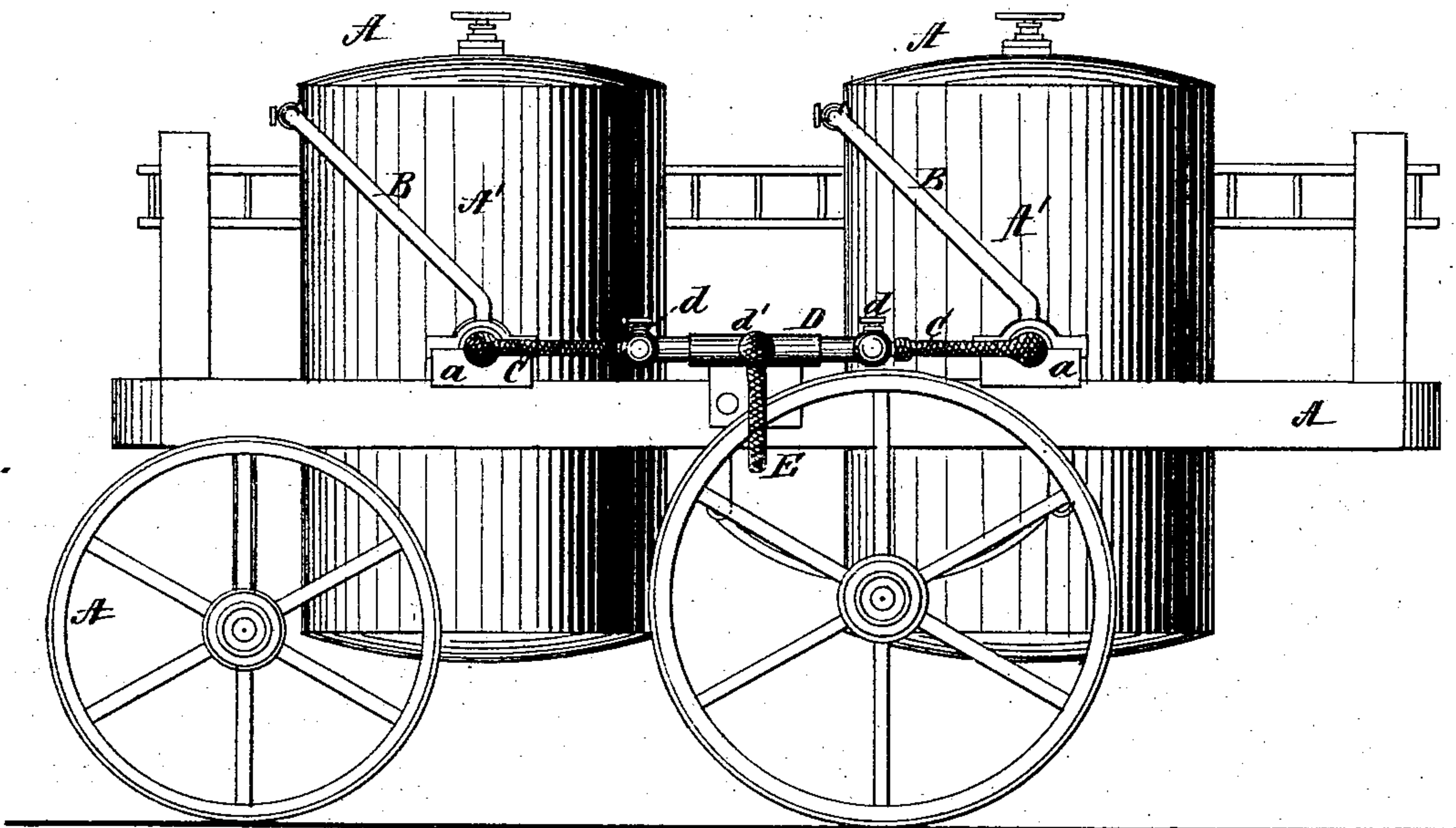


Fig. 2.

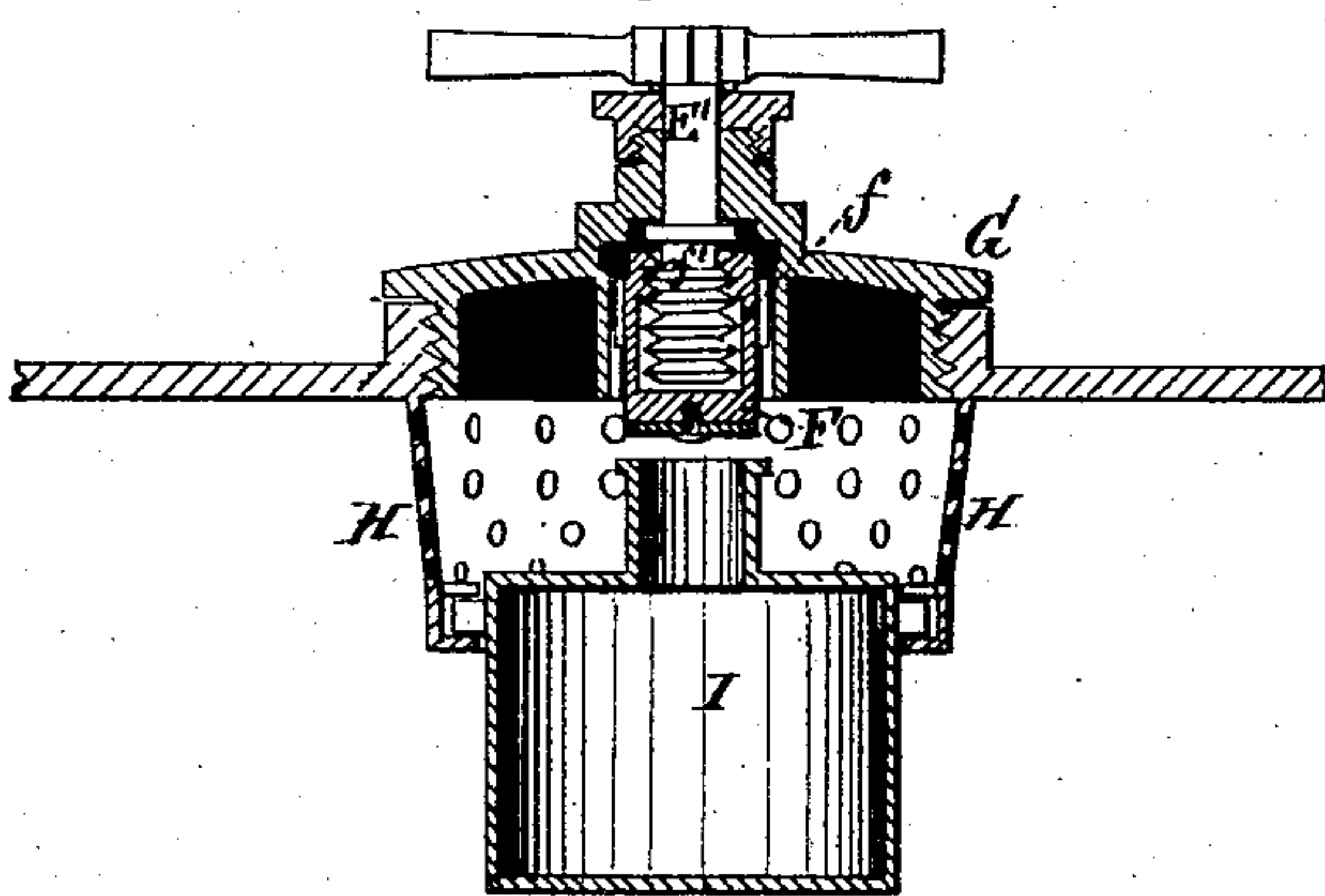
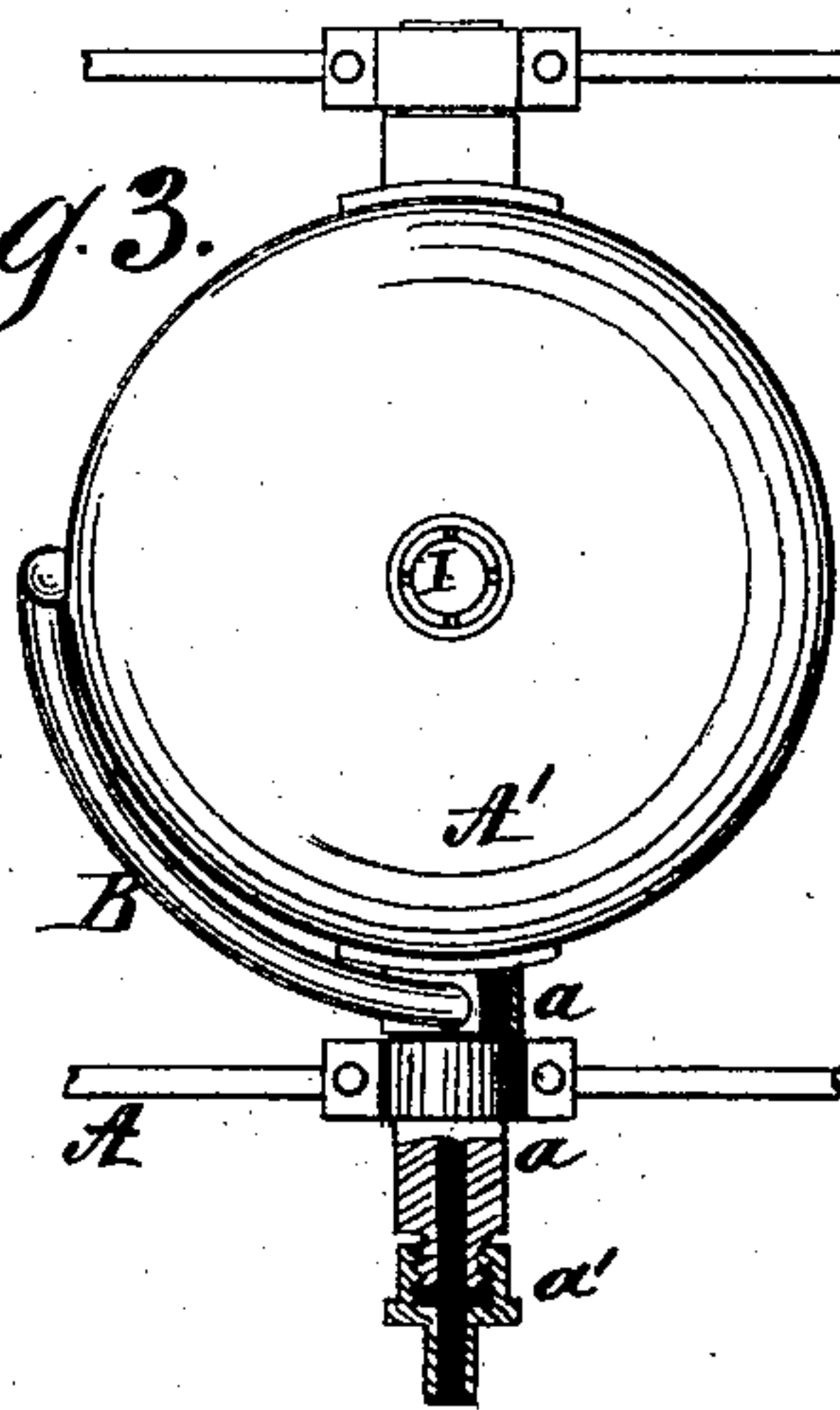


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JACOB B. VAN DYNE, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **157,040**, dated November 17, 1874; application filed July 30, 1874.

CASE B.

To all whom it may concern:

Be it known that I, JACOB B. VAN DYNE, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and Improved Fire-Extinguisher; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a side elevation; Fig. 2, a diametrical sectional elevation; Fig. 3, a top view, partly in section.

The invention relates to fire-extinguishers placed side by side and sometimes on the same vehicle. It consists in several improvements, which will be fully described, and then pointed out in the claims.

A A represent two fire-extinguishers, having trunnion-chambers *a a*, connected by pipes B B with the vessels A' A'. The trunnion-chambers are provided with end caps *a'*, on which the flexible pipes C are fastened. The latter are connected by a tube, D, having a cock, *d*, at each end, and a short tube, *d'*, on which fits the nozzled discharge-pipe E.

I am aware that two cylinders or chemical fire-extinguishers have been connected with the same discharge-pipe; but it is found in the hurry and confusion of a fire that the cock connecting with the used extinguisher is often left open or gets turned, and the gas in said cylinder (having a pressure generally of about forty pounds) is made to antagonize the expressing force of the gas in the working extinguisher. The gas in the working and exhausted cylinder having a relative pressure of about one hundred and twenty to one hundred and forty pounds to the square inch, the chemicals will first be run partially into the vacant cylinder, and an equipressure produced in both before they will be expelled to any appreciable extent, and then only with a force of about eighty pounds, or greatly less than was intended.

By making my caps *a'* readily and quickly detachable, and using hose or flexible connections

therewith, the communication of the hose with the exhausted extinguisher may be quickly broken, and the possible oversight of forgetting to close the communication with the exhausted extinguisher rendered apparent by the discharge of the liquid at the point where the cap *a'* is detached from the said exhausted extinguisher; whereas, were the communication between the two extinguishers inadvertently left open, and the hose still attached to the exhausted extinguisher, the chemicals would be expelled through the nozzle at a diminished pressure, owing to the imperceptible passage of a portion of the contents of the operating extinguisher to the exhausted one.

On vehicles with two or more extinguishers, invertible to mix the chemicals, I find that it is greatly desirable to economize room by placing these as close together as possible; but the elevation of the stopper-rod E compels their location at a considerable distance from each other to admit of rotation. I obviate this difficulty and enable the extinguishers to turn in close proximity by using a stopper, F, with a frame, *f*, and nut *f'* in the top thereof. This allows the screw-rod E to be swiveled and to actuate the stopper, moving the frame up over itself when the stopper is to be removed, and the reverse when it is to be resealed.

In charging the large extinguishers, I find that the weight of the cover G, united to that of the holder H, and also of the acid-chamber I, makes the labor of manipulation very difficult and onerous. In order to avoid this, I make the cover independent and the holder H in one piece with vessel A', whereby the top can be taken off, the acid-chamber filled or replaced, and the cover restored without lifting the holder, the whole operation being done with much more convenience, as well as rapidity.

Having thus described my invention, what I claim as new is—

1. The combination, with two extinguishers, A A, connected with a common discharge-pipe, of the intermediate flexible pipes C C

and chambers *a*, having detachable caps *a'*, as and for the purpose described.

2. The combination, with the acid-vessel stopper, of swiveled screw-rod *E*, frame *f*, and nut *f'*, as and for the purpose set forth.

3. The acid-vessel holder *H*, permanently attached to the vessel *A'*, in combination with

the acid-vessel *I*, detachably locked in the bottom of said holder *H*, substantially as and for the purpose described.

J. B. VAN DYNE.

Witnesses:

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