

J. B. VANDYNE.

CHEMICAL FIRE EXTINGUISHER.

No. 175,789.

Patented April 4, 1876.

Fig. 1.

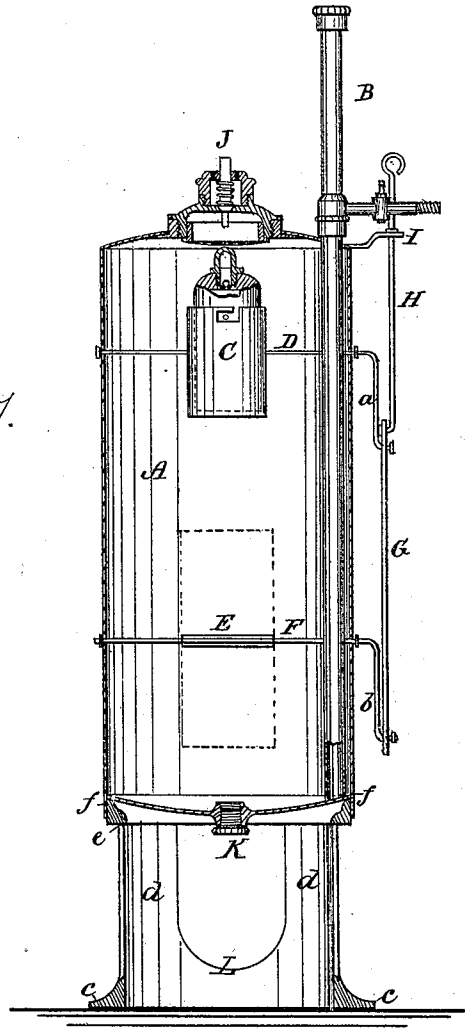
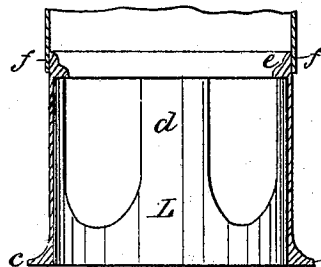


Fig. 2.



WITNESSES:

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JACOB B. VANDYNE, OF LOUISVILLE, KENTUCKY.

IMPROVEMENT IN CHEMICAL FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **175,789**, dated April 4, 1876; application filed June 12, 1875.

To all whom it may concern:

Be it known that I, JACOB B. VANDYNE, of Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful Improvement in Chemical Fire-Extinguishers; 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 vertical section; Fig. 2, a sectional detail of the supporting-base.

This invention relates to certain improvements in chemical fire-extinguishers; and it consists in the combination, with the shaft carrying the acid-vessel and the shaft carrying an agitator, of a suitable outside connection, whereby the tilting of the acid-vessel and the agitation and mixing of the chemicals are effected by one and the same movement, and from any floor of a building.

In the drawing, which shows a stationary extinguisher with stand-pipe, A represents the outer vessel, which contains the solution of carbonate of soda in water. B is the stand-pipe, extending up through the building, and having hose connections and pipes upon each floor. C is the acid-vessel, which is mounted and locked in a cup upon a shaft, D. Said shaft is journaled in tight bearings in the vessel A, and is provided with a crank, *a*. E is an agitator for the more thorough mixing of the chemicals. The said agitator is attached to a shaft, F, also journaled in tight bearings in the vessel A, and is provided with a crank, *b*. The two cranks *a* and *b* of the acid-vessel and agitator-shafts are connected by a rod, G, and the said rod is attached to a second rod, H, which extends up through the building by the side of the stand-pipe, and by means of which the two shafts are turned to mix the chemicals from any floor. I is a guide attached to the body of the extinguisher, which serves to hold the rods in place and prevent the cranks from getting upon the dead-center, the said rod H being provided with a stop-collar or projection, which, striking the guide I, limits the downward movement of the cranks, keeping them always in position to be elevated from above. Thus it will be seen the weight of the rod acts as a lock to hold the acid-vessel in

place, and yet the arrangement to keep the crank off the dead-center is such that the acid-vessel may be operated from the upper stories without descending to release the locking device, which, under ordinary circumstances, would be required. J is a relief valve, to obviate any danger of explosion resulting from too great pressure, and K is a vent-plug, through which the contents of the extinguisher are allowed to escape when the vessel is to be cleaned. L is the supporting-frame for the extinguisher, which consists of a circular base, *c*, vertical supports *d*, and a circular top, *e*, which fits inside, and is bolted to a flange, *f*, of the extinguisher.

In constructing my devices for operating the acid-vessel and agitator-shafts simultaneously, I do not confine myself to a rod for connecting the two, as shown, but may employ a rack with pinions upon the two shafts, or may use an intermediate gear-wheel, with a lever, in connection with the two pinions.

By means of my improved arrangement the chemicals may be mixed from any floor by operating the rod H, and by the connection of the two shafts of the agitator and acid-vessel, respectively, the most thorough mingling of the chemicals is produced, and the most powerful effect of the charge is immediately available.

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

1. The combination, with the horizontal shaft of the acid-vessel and the horizontal shaft of the agitator, of a suitable outside connection, whereby the operation of the two is made simultaneous, as and for the purpose described.

2. The combination, with the acid-vessel and the guide I, of the rod H, having a stop-projection attached thereto and extending up through the building, for the double purpose of holding the acid-vessel in position and adapting the same to be upset from the upper stories without preliminary adjustment, substantially as described.

The above specification of my invention signed by me this 10th day of June, 1875.

JACOB B. VANDYNE.

Witnesses:

SOLON C. KEMON,
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