

(No Model.)

L. W. TAYLOR.
FIRE EXTINGUISHER.

No. 423,354.

Patented Mar. 11, 1890.

Fig. 1.

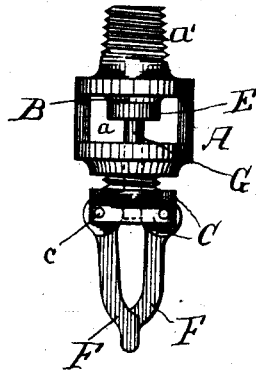


Fig. 2.

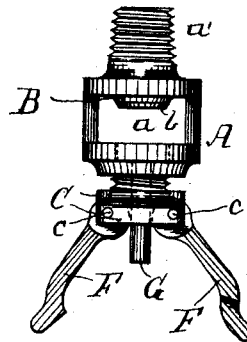


Fig. 3.

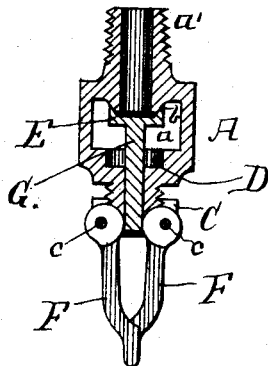
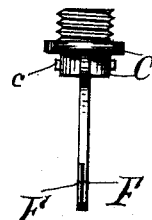


Fig. 4.



WITNESSES

C. J. Bell
Charles Stockman

INVENTOR

Luke W. Taylor
By *Wm. Albbe*
Attorney

UNITED STATES PATENT OFFICE.

LUKE W. TAYLOR, OF SPRINGFIELD, VERMONT, ASSIGNOR OF ONE-HALF TO
WILLIAM H. H. SLACK, OF SAME PLACE.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 423,354, dated March 11, 1890.

Application filed May 22, 1889. Serial No. 311,670. (No model.)

To all whom it may concern:

Be it known that I, LUKE W. TAYLOR, a citizen of the United States, residing at Springfield, in the county of Windsor and State of Vermont, have invented certain new and useful Improvements in Fire-Extinguishers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in automatic fire-extinguishers, the object being to simplify and cheapen their construction and improve their general efficiency in use.

The invention consists in providing a body or frame for a valve which will not obstruct the passage of the water or fluid, and also in 20 providing a valve and its attachments which will be entirely out of the channel of the fluid when the said valve is open.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of my improved device, showing the arms sealed and the valve raised to its seat. Fig. 2 is a similar view showing the arms spread and the extinguisher ready for operation. Fig. 3 is a sectional view. Fig. 4 is a modification of my device.

Like letters of reference denote like parts throughout the several figures.

The body A, which is preferably cast in one piece, has openings *a* in the sides thereof for the free passage of the fluid, and also has at one end a screw-threaded fluid-connection *a* and an inward projection B, in which is formed the valve-seat *b*. The other end is screw-threaded and provided with the slotted nut C. Just above the screw-threaded portion which accommodates the nut C an internally-extending cavity D is formed in the body A to accommodate the valve E when it drops from its seat. By this construction the valve in dropping down into the cavity leaves the passage-way for the fluid unobstructed. The slotted nut C is perforated to accommodate the pivot-bolts *c*, which pass through the walls of the said slotted nut C and through the cam-heads of the arms F. By the heads

of the arms F being cammed and pivoted in close proximity to the valve-stem G they prevent the valve E from falling from its seat when the said arms are brought together, and then they may be eithertied with cord, sealed 55 with ordinary sealing-wax, or soldered with some of the well-known soft solders.

Under my invention, as herein shown, the arms are brought together sealed or soldered, which causes the cams to clamp the valve-stem and keep the valve up to its seat. When the temperature reaches the fusing-point of the wax or solder, the wax or solder melts and the arms fall apart, causing the valve to drop into the cavity, leaving an unobstructed channel for the fluid.

It will be observed that in putting my device into operation the wax or solder has simply to be melted, or if it is desired to have the use of the water before the said wax or solder is melted a slight tap on the valve will break away the arms, which will fall apart and allow the valve to drop and the water to flow freely, and according to my construction there is no valve mechanism in the road of the fluid when the device is in operation.

I am aware that it is old to provide a nut in which are pivoted swinging arms to be soldered together. I am also aware that it is old to provide an extinguisher with a valve, 80 a screw-threaded valve-stem, and screw-threaded swinging arms. I therefore do not broadly claim any of the above-mentioned devices, but only the device as described and shown herein and its legitimate equivalents. 85

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

1. In a fire-extinguisher, the combination, with a valve having a stem controlled by a pair of arms having cam-heads, of a slotted nut located on one end of the body of the extinguisher in which said cam-heads are pivoted, substantially as and for the purpose set forth.

2. In a fire-extinguisher, the combination, with the body thereof having an inward projection, in which is formed a valve-seat adapted to receive a valve, of a pair of arms having an eccentric movement and a perfor-

rated slotted nut, all adapted to be operated substantially as set forth.

3. In a fire-extinguisher, the combination of the body thereof cast all in one piece and
5 having a cavity formed therein, a valve-seat situated opposite said cavity, with the valve E, valve-stem G, and the cam-heads of the pivoted arms F, the said valve-stem arranged to slide between the cam-heads when
10 the valve is released, substantially as shown and described.

4. In a fire-extinguisher, the combination of the body thereof cast all in one piece and having oppositely-situated hollow screw-
15 threaded ends, with the perforated slotted nut, and the pivoted arms provided with cam-heads secured in the slot of said nut, sub-

stantially as shown and described, and for the purpose set forth.

5. In a fire-extinguisher, the combination of 20 the body thereof having a central bore, with the valve E located in alignment with said bore, the slotted nut C, attached to one end of said body, the cam-arms F, and the pivot-bolts c, on which the cam-arms are pivoted, 25 substantially as shown and described, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

LUKE W. TAYLOR.

Witnesses:

H. C. SLACK,
A. M. ALLBE.