

(No Model.)

A. M. BURRITT.
FIRE EXTINGUISHER.

No. 270,011.

Patented Jan. 2, 1883.

fig. 1

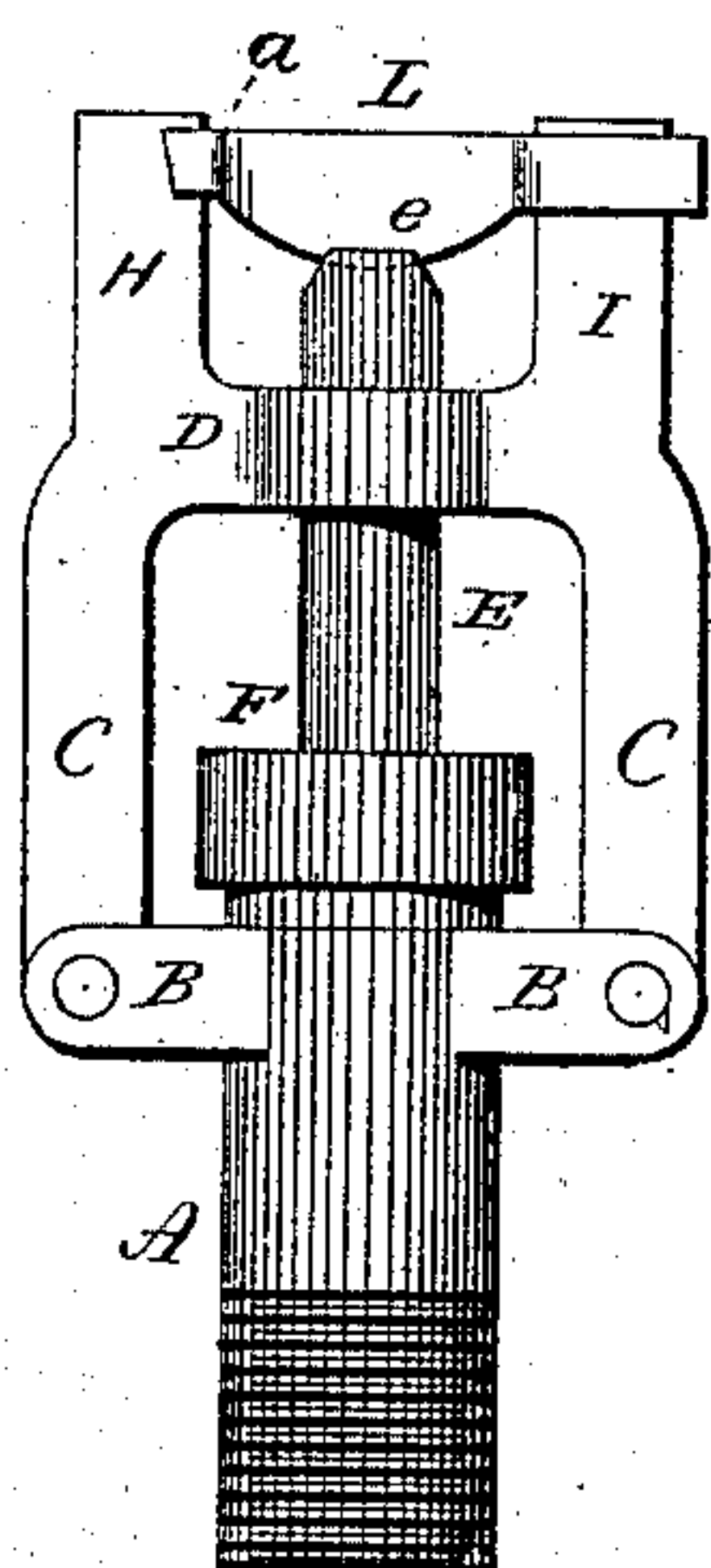


fig. 2

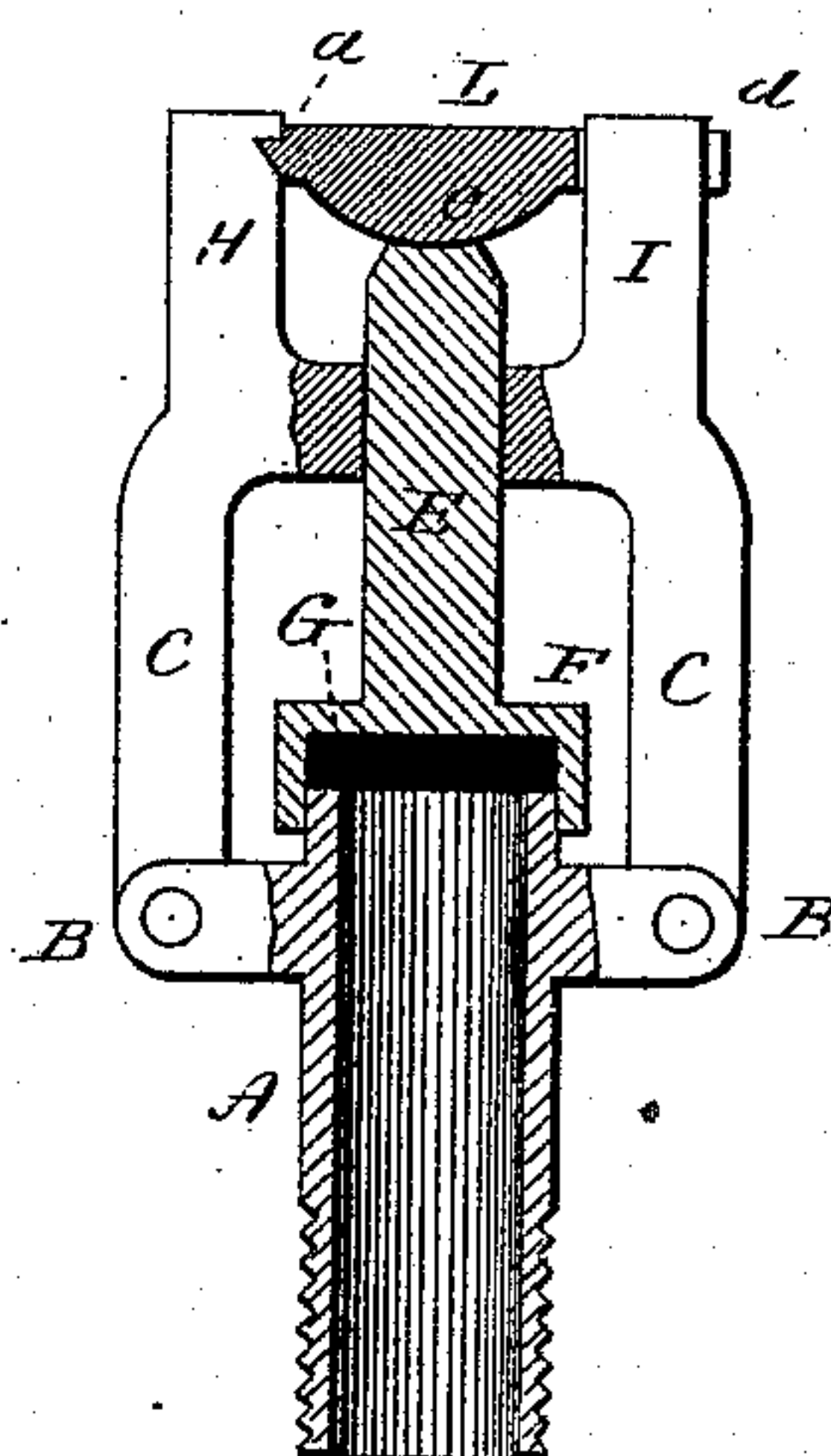
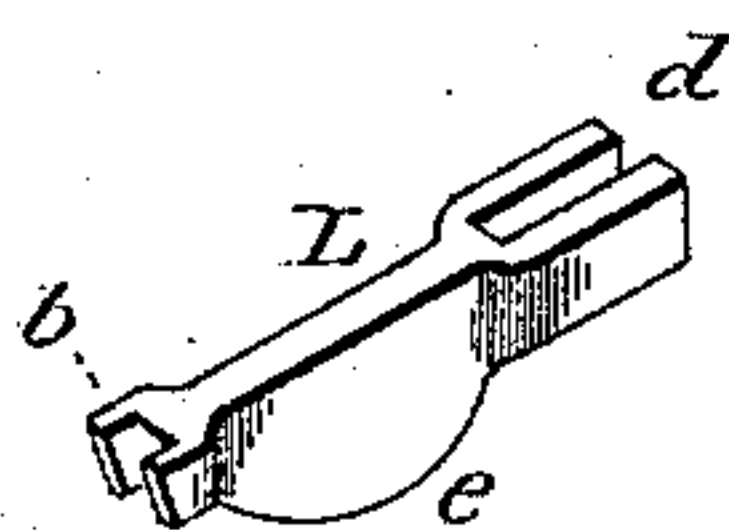


fig. 3



Witnesses.

J. H. Murray
J. C. Earle

Albert M. Burritt.

Inventor.

By Atty.

J. C. Earle

UNITED STATES PATENT OFFICE.

ALBERT M. BURRITT, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
A. BURRITT HARDWARE COMPANY, OF SAME PLACE.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 270,011, dated January 2, 1883.

Application filed September 23, 1882. (No model.)

To all whom it may concern:

Be it known that I, ALBERT M. BURRITT, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Fire-Extinguishers; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view; Fig. 2, a vertical central section; Fig. 3, a perspective view of the lever detached.

This invention relates to an improvement in that class of fire-extinguishers which consist of a nozzle arranged at different positions in an apartment, and whereby when a fire occurs in that apartment the heat generated therefrom liberates the valve which holds back the flow of water, and permits the water to escape and be distributed by the apparatus itself over a large space within that apartment.

Various devices for the distribution of water in the apartment have been devised; but in practice it is found that a distributor which will start the water in a thin sheet, so that it will soon break into spray, is the most successful; but with this class of distributors a difficulty has been experienced in sealing the water-way by means of a device held by solder or other fusible material without the employment of screws or other means of adjusting or forcing the valve upon its seat.

The object of my invention is to overcome the difficulties existing in this class of distributors; and it consists in the construction as hereinafter described, and particularly recited in the claim.

A represents the nozzle, which is attached to the pipe in the usual manner of attaching distributors. On opposite sides, near the outer end of the nozzle, arms B extend to the right and left, and to these arms two legs, C, of a frame are attached. This frame extends forward of the nozzle, and in a cross-bar, D, carries the spindle E of the valve or distributor F, which works loosely through the bar, and so as to be moved freely in axial line toward or from the mouth of the nozzle, as the case

may be. The distributor F is cup-shaped, opening toward the nozzle, and carrying upon its inside any suitable elastic material, G, but less in thickness than the depth of the cup. Outside the cross-bar D the frame extends, having two arms, H I. In one of these a notch, a, is made.

L is a lever, slightly forked at one end, as at b, Fig. 3, and so as to engage the arm H under the notch a, as seen in Fig. 2. The other end of the lever L is forked, as at d, Fig. 3, so as to pass down over the arm I, one leg of the fork each side the arm I, but so as not to make a tight fit. The under side of the lever L is cam-shaped, or projects downward, as at e, and so as to enter a notch in the end of the spindle E, or to bear firmly on the end and serve as a means for applying the power of the lever to the spindle. When the valve has been set upon the mouth of the nozzle the end b of the lever is introduced beneath the notch a in the arm H, the lower side of the lever brought to bear upon the spindle, and the forked end pressed hard down until a sufficient force be applied to hold the valve against the pressure of the water, and in that position the end d of the lever L is soldered to the arm I. In thus applying the power of the lever the spring G is pressed upon the mouth of the nozzle, so as to make a water-tight joint. When a fire occurs and sufficient heat be generated to melt the solder the arm L is released, taking from the valve the power which held it against the force of the water. The valve thus liberated flies outward, guided by the spindle E, until the back of the valve strikes the bar D and is there arrested. In that position the cup serves as a distributor, into which the stream of water will strike and be deflected outward over the edge of the cup in all directions. In this construction it is impossible for any water which escapes from the nozzle to reach the solder until after the liberation of the valve shall have been complete. Hence such flow of water cannot possibly check or interrupt the action of the heat upon the solder.

I am aware that cup-shaped distributors have been arranged in front of a nozzle, and also that distributors have been made movable from a position close upon the nozzle to

a position in front, there to serve as a distributor, and therefore do not claim broadly such construction; but

What I do claim is—

5 The combination of the nozzle A, carrying arms B, and the frame C C D, with the cup-shaped valve F, the spring or elastic material G therein, the said valve provided with a spindle working freely through the arm D, and the
10 lever L, the frame being extended to form a

fulcrum for one end of the lever, and the lever arranged to bear forcibly upon the spindle of the valve, and secured to an extension of the frame upon the opposite side to the fulcrum, substantially as described.

ALBERT M. BURRITT.

Witnesses:

JOHN E. EARLE,
JOS. C. EARLE.