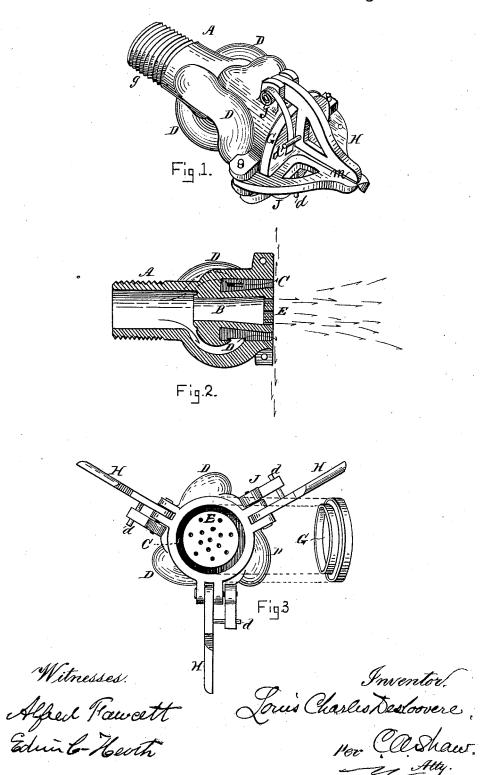
## L. C. DESLOOVERE.

SPRAY NOZZLE FOR FIRE EXTINGUISHERS.

No. 262,578.

Patented Aug. 15, 1882.



## UNITED STATES PATENT OFFICE.

LOUIS C. DESLOOVERE, OF SALEM, MASSACHUSETTS.

## SPRAY-NOZZLE FOR FIRE-EXTINGUISHERS.

SPECIFICATION forming part of Letters Patent No. 262,578, dated August 15, 1882.

Application filed June 2, 1882. (No model.)

To all whom it may concern:

Be it known that I, Louis Charles Des-LOOVERE, of Salem, in the county of Essex, State of Massachusetts, have invented a certain new and useful Improvement in Spray-Nozzles for Fire-Extinguishers, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention apperto tains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which-

Figure 1 is an isometrical perspective view; Fig. 2, a vertical longitudinal section, and 15 Fig. 3 a top or plan view.

Like letters of reference indicate corresponding parts in the different figures of the draw-

My invention relates to that class of spray-20 nozzles which are adapted for the automatic fire - extinguishers permanently erected in buildings; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which 25 a more effective device of this character is pro-

duced than is now in ordinary use. In the drawings, A represents the body of the nozzle; B, the main or central duct; C, the annular openings; D D D, the spiral ducts; 30 E, the mouth-piece to the duct B, and G the cap. The ducts D branch from the main duct B and pass spirally around the body A into the annular opening or discharge orifice C, as shown in Fig. 2. The main duct is provided 35 with a foraminous cap or orifice, E, designed to divide the main stream into a large number of small streams or produce an ordinary direct spray. The nozzle is stoppered by means of the cap G, which is secured in position on the 40 outer end of the same by a series of arms, H, hinged to the body A, and respectively provided with springs J. These arms are preferably composed of brass or some good conductor

of heat, and are attached at their meeting edges

m by means of a solder which melts or fuses 45 at a very low temperature. The springs J are secured to the journals of the arms H, and act expansively against the pins d to throw the arms outwardly and release the cap G, being designed to aid the stream of water in remov- 50 ing the cap and opening the nozzle in case of fire.

In the use of my improvement the cap and arms of the nozzle are arranged as shown in Fig. 1, the arms being soldered together, as 55 described, and the body A attached to the supply-pipe by the screw g. When a fire occurs and the heat becomes sufficient in the vicinity of the nozzle to melt the solder the arms H will be thrown back, as shown in Fig. 3, the 60 cap dislodged, and the stream of water permitted to pass through the nozzle in a manner which will be readily obvious to all conversant with such matters without a more explicit description. That part of the stream passing 65 through the orifice E will assume the shape of a direct spray; but the part passing through the ducts D into the annular opening C will leave the nozzle more nearly at right angles to the body A, receiving a whirling or rotating 70 motion from the spiral formation of the ducts, and thus producing, in connection with the central stream, a compound jet which is very effective in extinguishing fires.

It will be obvious that the springs J may be 75 omitted, if desired, without departing from the spirit of my invention.

Having thus explained my improvement,

what I claim is-

The improved nozzle described, the same 80 consisting of the body A, ducts D D D, annular opening C, orifice E, cap G, arms H, and springs J, constructed and arranged to operate substantially as specified.

LOUIS CHARLES DESLOOVERE.

Witnesses:

C. A. SHAW,

C. H. GRIFFIN.