(No Model.)

W. B. FOWLER.

AUTOMATIC SPRINKLER OR FIRE EXTINGUISHER.

No. 302,991. Patented Aug. 5, 1884.

Fig. 1.

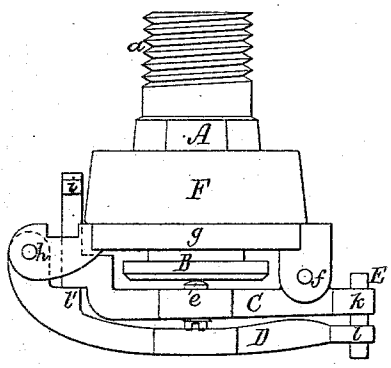


Fig. 2.

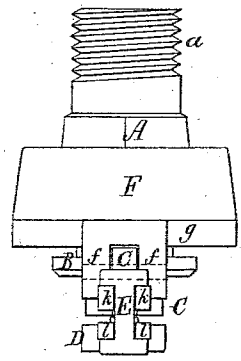


Fig. 4.

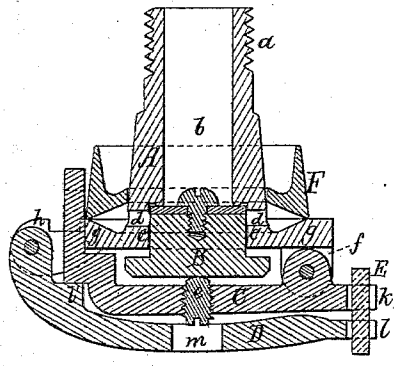
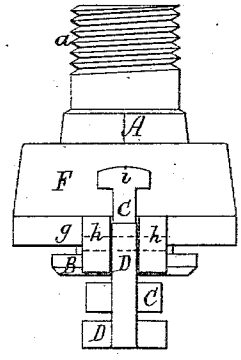


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

WALTER BAKER FOWLER, OF LAWRENCE, MASSACHUSETTS.

AUTOMATIC SPRINKLER OR FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 302,991, dated August 5, 1884.

Application filed June 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, WALTER BAKER FOWLER, of Lawrence, in the county of Essex, of the Commonwealth of Massachusetts, have invented a new and useful Improvement in Automatic Sprinklers or Fire-Extinguishers; and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, Figs. 2 and 3 opposite edge views, and Fig. 4 a longitudinal section, of a sprinkler containing my invention, the nature of which is defined in the claims hereinafter presented.

The apparatus is for use in extinguishing a fire that may take place within a structure or room of a building, and is to be placed in the upper part of the said room or structure, and adapted to a pipe or conduit for carrying water under pressure into the chamber of the said apparatus.

In the drawings, A denotes the body of the sprinkler, it being screw-threaded at its upper end, as shown at *a*. Within the body is a chamber, *b*, which at its lower end opens into a cylindrical space, *c*, of larger diameter, open at bottom, and having a series of educts, holes, or perforations, *d*, leading laterally out of it. A cylindrical valve, B, fits into the space *c* and rests upon the upper end of a screw, *e*, screwed upward through a lever, C, arranged as shown, and fulcrumed to ears *f f*, extending downward from a flange, *g*, projecting from the body A, just below the holes *d*, such flange having its upper surface sloping or concave, as represented. The longer arm of the lever C extends upward between two other ears, *h*, projecting from the flange in range, or thereabout, with it, as shown, such arm at its end having a head or projection, *i*, to prevent it from falling between the arms far enough for the valve to drop out of the space *c*. The shorter arm of the lever C is forked, its fork *k* being directly over the fork *l* of an auxiliary lever, D, fulcrumed to the ears *h*. The longer arm of the lever C takes a bearing on the lever D, as shown at *l'*. A fusible connection or piece of readily-fusible metal, E, shaped like the letter **I**, is fixed, as shown, within the forks of the two levers C and D. Furthermore, an annulus, F, concave, as represented on its under side, surrounds the body A loosely, and rests upon the flange *g*. There is a hole, *m*, through the lever D, in order to enable a person to gain access with a screw-driver to the screw *e*, to turn it to set the valve up to its seat at the top of the space *c*. On the atmosphere of the room, or that next the sprinkler rising to a temperature sufficient to melt the fusible connection E, the levers will be set free on such melting taking place, and the valve, by the pressure of the water, will be depressed, so as to allow the water to be discharged through the holes or perforations *d* into the annular space between the flange *g* and the ring F. From such space the water will be discharged radially in a thin sheet, such water, in making its escape, forcing the ring upward, and being caused by it and the flange to be discharged in a thin sheet, as stated.

I claim in the said automatic sprinkler—

1. The combination of the chambered and perforated body and its valve with the two forked levers and their readily-fusible connection, constructed and adapted substantially as set forth.

2. The combination of the chambered and perforated body and its flange with the ring encompassing such body and resting on the flange, and with the valve and the two levers and the fusible connection of the said levers, adapted and arranged substantially as represented.

3. The combination of the chambered and perforated body and its valve with the two forked levers, their fusible connection, and the valve-adjusting screw in one of such levers, all being arranged and applied substantially and to operate as set forth.

4. The combination of the chambered and perforated body provided with the flange and two sets of ears projecting therefrom, as set forth, with the valve and its seat arranged in the lower part of such body, and with the two forked levers fulcrumed to the said sets

of ears, and arranged and provided with a fusible connection to both of them, (the said levers,) and with a head to the longer arm of the upper of them, all as shown and described, such head being to limit the fall of the lever, in order to prevent the valve from dropping out of its sustaining-recess while water may be escaping through the perforations of the body and between the flange and the ring over such flange.

WALTER BAKER FOWLER.

Witnesses:

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