E. L. ABBOTT.

FIRE-EXTINGUISHER.

No. 181,614. Patented Aug. 29, 1876.

Fig. 1

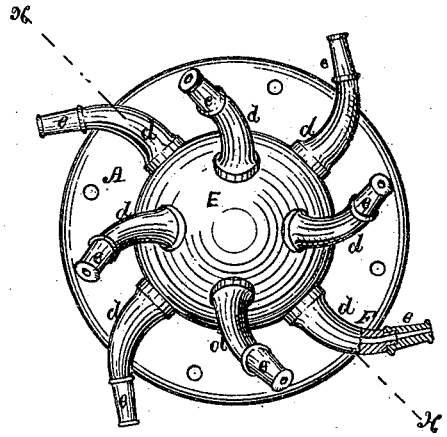
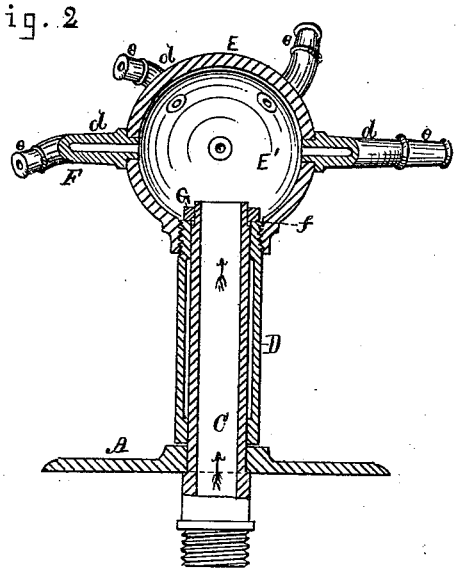


Fig. 2



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UNITED STATES PATENT OFFICE.

EVERETT L. ABBOTT, OF SOUTH BEND, INDIANA.

IMPROVEMENT IN FIRE-EXTINGUISHERS.

Specification forming part of Letters Patent No. **181,614**, dated August 29, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, EVERETT L. ABBOTT, of South Bend, in the county of St. Joseph and State of Indiana, 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 thereof, which will enable others skilled in the art to which my invention appertains to make and use the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 represents a general plan or top view of a fire-extinguisher embodying my invention; and Fig. 2 represents a vertical central section of the same, taken on line *x x*, Fig. 1.

Like letters of reference indicate like parts.

The object of my invention is to provide an apparatus for extinguishing fire, to be located at any desired point within a building, and connected with the hose of a fire-engine, or with the water-main, and so constructed and arranged as to discharge a series of streams of water radiating therefrom, to and in contact with all parts of the room in which the apparatus is located; and to that end my invention consists in the arrangement and construction of the several parts of said apparatus, as is hereinafter more fully described.

In the drawing, A represents the base of the apparatus or fire-extinguisher, which is made of metal, and so constructed as to admit of being permanently secured to the floor of the building, or to or upon a suitable platform. C is a vertical stem or stand-pipe, which passes upward centrally through the base A, and is permanently secured therein, and is so arranged at its lower end as to admit of being coupled to the hose or other suitable pipe connecting with the discharge-pipe of a fire-engine or with a water-main. D is a metal sleeve fitted upon stem C, and so arranged as to freely revolve thereon. E is a spherical case, which is attached to the upper end of the sleeve D by being screwed thereon, or otherwise, and so as to revolve therewith. The case E is made hollow, and so as to form a spherical chamber, E′, into which the water is discharged from the engine or water-main through the stem C, as indicated by the arrows in Fig. 2, and is provided with a series of discharge tubes or pipes, *d*, secured within the wall of the case and radiating therefrom, as shown in Fig. 1. The tubes or pipes *d* are each provided with the ordinary discharge-nozzle *e*, and curved, as shown at F, and are so secured within the wall of the case as to admit of being turned, so as to change the position of the discharging end when desired, the object being to change the direction of the various streams of water as discharged from the chamber, and thereby increase or decrease the rotary movement of the case. The stem C is provided at its upper end with an annular collar, G, permanently secured thereon, and so arranged as to form an annular shoulder, *f*, adapted to bear against the upper end of the sleeve D, when the case is forced upward by the pressure of water within the chamber, thereby forming a packing, which prevents the water from passing downward into the sleeve between its inner surface and the stem.

To extinguish a fire within the apartment of the building in which my said apparatus is located, the operation is as follows: A volume of water is forced into chamber E′ through stem C, and is discharged from said chamber through the several tubes or pipes *d*, thereby imparting a rotary motion to the case by the centrifugal force of the water as it escapes from the tubes or pipes, and causing the several streams of water to radiate in all directions from the case, and so as to completely wet all parts of the walls and ceiling of the apartment.

The advantages in the construction of my said fire-extinguisher are its simplicity and cheapness, in that it can be made a permanent fixture in the apartment, and can be operated so as to completely extinguish the fire without requiring firemen to enter the apartment.

The object of constructing the case so as to form the spherical chamber, with which the discharge-tubes communicate, is to insure a uniform pressure of the water upon all parts of the case, thereby causing an equal amount of water to be discharged through each tube and with equal force.

I do not limit myself to the use of my said apparatus as a fire-extinguisher only, as it

may be used as a rotary fountain, and in which case it is only necessary to reduce the size of some of its parts.

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

1. The combination, with the hollow stem C, of the revolving sleeve D and spherical case E, substantially as and for the purpose specified.

2. The combination, with the spherical case F, forming the spherical chamber E′, of the curved discharge-tubes *d*, inserted within the shell of the case, and so arranged as to admit of being adjusted to change the direction of the discharge of the various streams of water, substantially as and for the purpose specified.

3. The annular collar G, secured upon the stem C, and adjusted to form a packing, so as to prevent the water from escaping between the stem and inner surface of the sleeve D, as specified.

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Witnesses:
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