(No Model.)

M. MAGALDI.

FIRE EXTINGUISHER.

No. 409,796. Patented Aug. 27, 1889.

Fig. 1.

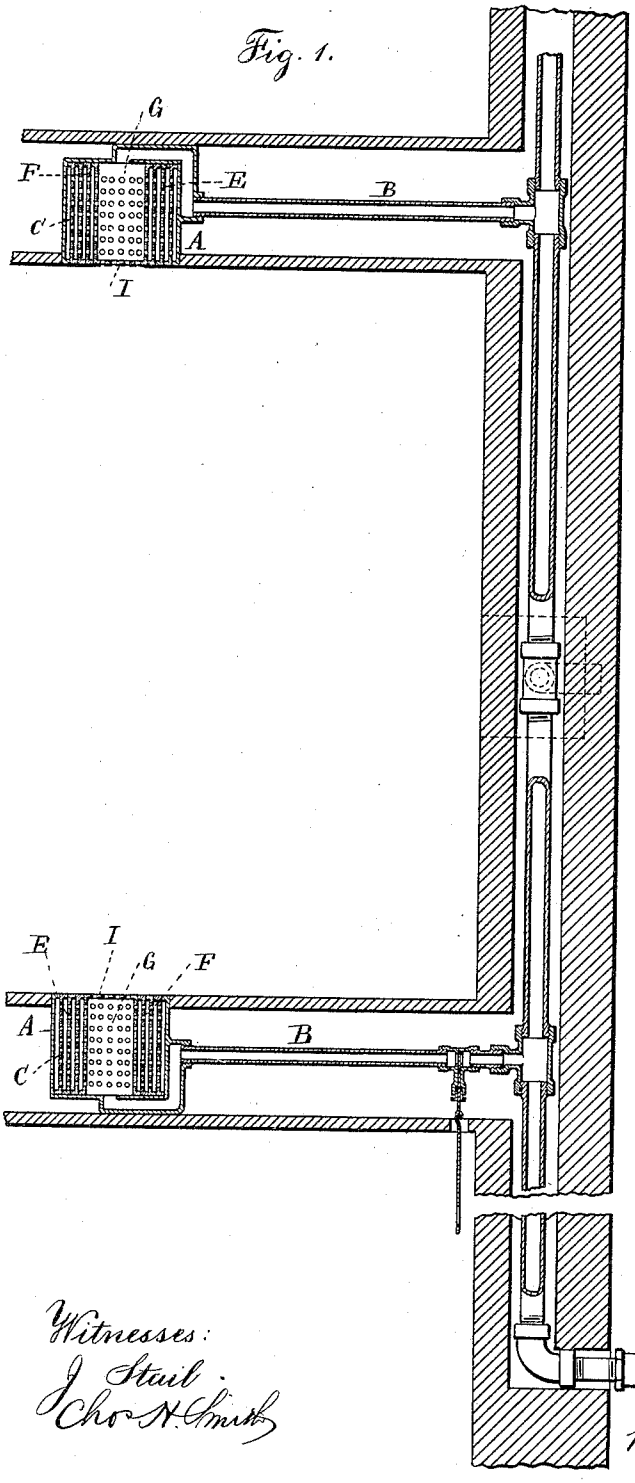
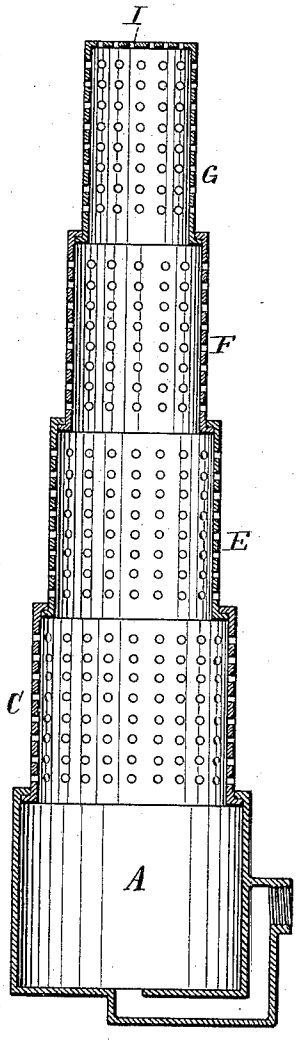


Fig. 2.



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UNITED STATES PATENT OFFICE.

MICHELE MAGALDI, OF NEW YORK, N. Y.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 409,796, dated August 27, 1889.

Application filed April 15, 1889. Serial No. 307,226. (No model.)

To all whom it may concern:

Be it known that I, MICHELE MAGALDI, of the city and State of New York, have invented an Improvement in Fire-Extinguishers, of which the following is a specification.

Buildings have heretofore been provided with stationary water-pipes either along the ceilings or against the upper portions of the walls of the respective floors, and these pipes have been provided with valves for directing the water into the desired apartment, and in some instances these pipes have terminated near the sidewalk with a connection for the hose from an engine or hydrant, and in other cases the pipes have remained full of water from a suitable reservoir and been provided with automatic sprinklers brought into action by the increase of temperature consequent upon a fire occurring within a room or building. In all of these cases the sprinklers, and frequently the pipes, are visible within the room, and are objectionable in appearance and often form obstructions.

My present invention is intended to prevent the fire-extinguishing device being noticeable in the building or being an obstruction, and at the same time the sprinkling device is ready for instantaneous use, and is automatic, being brought into action by the pressure of the water when the same is turned onto the system of stationary pipes within the building.

My invention relates especially to an extensible sprinkler, the sections of which slide telescopically one within the other, so as to be closed up compactly with the end flush with the floor, ceiling, or wall, and the telescopical sections of the sprinkler are projected downwardly from the ceiling, upwardly from the floor, and laterally from the wall when the pressure of water acts upon the same, and the water is discharged in fine streams through openings in the extensible tubes of the sprinkler, and is thereby directed in the most efficient manner to all parts of the room for the extinguishment of the fire.

In the drawings, Figure 1 is a vertical section illustrating the manner in which my improvement may be applied, and Fig. 2 is a section in larger size of the telescopic sprinkler as distended.

The system of pipes in the building may be arranged in any desired manner, and they preferably run between the floor and ceiling, and are connected with a vertical pipe running to the street, and there may be branch pipes to the respective floors of the building, provided with cocks or valves, so that the water may be directed to the desired place. Each telescopical sprinkler is provided with a body A, permanently connected with the water-pipe B, and within this is a perforated tube C, provided with flanges to arrest the movement when such tube C is projected from the cylinder A, and there may be two or more sliding perforated tubes E, F, and G—one within the other, and provided with stops or flanges similar to a telescope—and each cylinder is perforated with holes of the proper size, and the smallest cylinder is closed by a head I, which by preference is also perforated. This extensible sprinkler is made to close, so that the ends of the cylinder may come flush one with the other, and hence when they are shut down the end of the sprinkler may be flush with the floor, with the surface of the wall, or with the surface of the ceiling, and there should be sufficient friction for holding the parts in the position where they may be placed; but when the water-pressure is exerted in the pipe the sections of the sprinkler are forced outwardly to form a column, through the perforations of which the water issues in all directions. The lengths of the sections of tubes forming the automatic sprinkler may vary according to the distance between the floor and ceiling and the thickness of the wall into which they are introduced, and they can be pushed back to place after the fire is extinguished and remain in position until again required for use.

It is to be understood that this invention allows for directing the water upon a fire within a building without the necessity of breaking the windows to give access to the same, and this is always desirable, because the opening or breaking of windows causes the fire to burn more rapidly by the supply of fresh air.

I claim as my invention—

1. The combination, with the stationary water-supply pipes within a building, of the automatic extensible sprinkler formed of per-

forated tubular sections sliding one within the other automatically by the pressure of the water, substantially as set forth.

2. The combination, with the stationary water-pipes in a building and the valves or cocks therein, of the automatic extensible sprinklers in the floor, walls, or ceiling, each sprinkler being composed of perforated tubular sections sliding telescopically one within the other, substantially as set forth.

Signed by me this 6th day of April, 1889.

MICHELE MAGALDI.

Witnesses:
LOUIS CANOLE,
ANTONIO AVONSJNO.