(No Model.)

A. McGEOCH.

STREET SPRINKLING, IRRIGATING, AND FIRE EXTINGUISHING SYSTEM.

No. 605,611. Patented June 14, 1898.

Fig. 1.

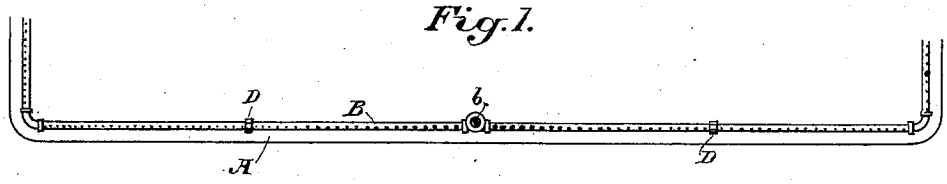


Fig. 2.

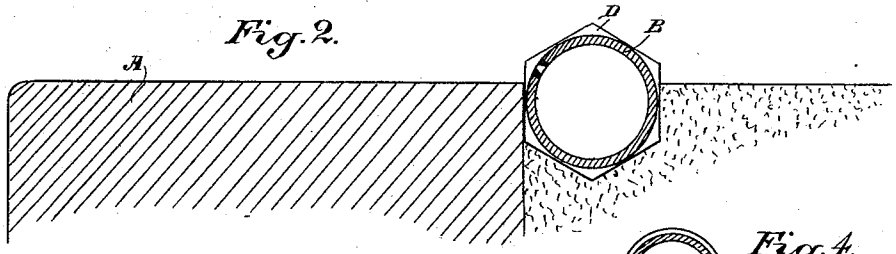
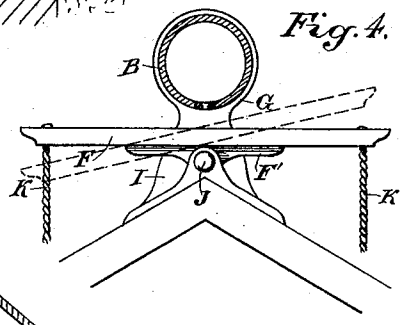


Fig. 4.



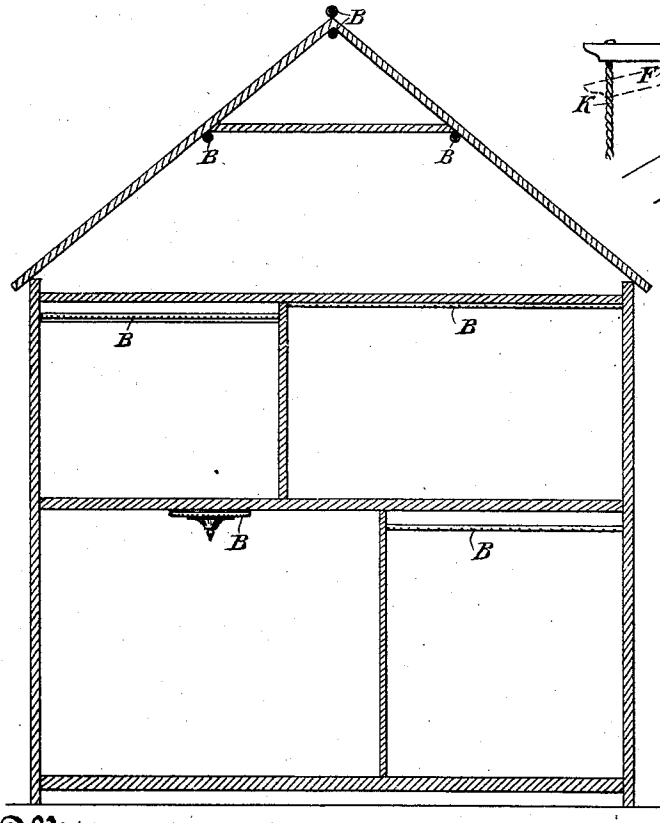


Fig. 3.

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UNITED STATES PATENT OFFICE.

ALEXANDER McGEOCH, OF OAKLAND, CALIFORNIA.

STREET-SPRINKLING, IRRIGATING, AND FIRE-EXTINGUISHING SYSTEM.

SPECIFICATION forming part of Letters Patent No. 605,611, dated June 14, 1898.

Application filed August 10, 1897. Serial No. 647,675. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER McGEOCH, a citizen of the United States, residing at Oakland, county of Alameda, State of California, have invented an Improvement in Street-Sprinkling, Irrigating, and Fire-Extinguishing Systems; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a water-supply device specially designed to be used for sprinkling and irrigating purposes and the extinguishing of fires.

It consists of the parts and the constructions and combinations of parts hereinafter described and claimed.

In the accompanying drawings, Figure 1 shows my invention as applied to sidewalks. Fig. 2 is a vertical section through the same. Fig. 3 shows it applied to houses. Fig. 4 shows my device in connection with a tilting board.

A represents the curb at the side of the street, and B is a pipe of any suitable or desired material and size laid along the side of the curb, as shown, and having one or more rows of holes made in it at suitable distances apart, so that jets of water may issue therefrom when water is supplied to the pipe under pressure. These pipes may be of any dimensions desired, and the holes should be finished with counterbored metal bushings, as shown at Fig. 2, so as to impart a nozzle shape to them, and in order to equalize the jets of water thrown from them they should be graduated in diminishing diameter as their distance from the supply stand-pipe or hydrant increases.

A hydrant *b* may be placed at or near the center of the street-block, supplied with a double stop-cock, and connected with the main water-pipe in the usual way. To each side of this hydrant my perforated pipes are suitably coupled above the stop-cock in the hydrant, so that the water may be turned into the pipe on either or both sides of the hydrant, as may be desired.

D are polygonal collars fixed on the pipe B at suitable intervals, so as to enable it to be turned about its axis by the application of a crank shaft or lever. By the application of this crank shaft or lever the pipe may be turned so as to present the row or rows of holes at different angles and thus direct the water over different portions of the surface to be sprinkled.

When applied to lawns, the pipes can be laid along one or more of the edges of the lawn, according to its size, and by rotating the pipes the angle of discharge of the water may be altered so as to sprinkle the whole of the lawn. When the lawn is very large, intermediate pipes may be used.

In order to lay the dust in the street, it is only necessary to turn the pipe outward, so that the water will be thrown onto the street, and I have found by experiment that a one-inch pipe, having holes bored at a short distance apart and having diameters gradually diminishing from the hydrant to the ends of the pipe, will easily carry water from one hundred and twenty to one hundred and thirty feet in each direction from the stand-pipe or hydrant and with sufficient force to sprinkle the full width of an ordinary street.

Fig. 3 shows the application of my system to the inside of a house for the purpose of extinguishing fire. The perforated pipes B may be laid wherever desired, preferably along the cornice, so as to be as much out of sight as possible, or they may take the place of the ordinary molding used for hanging pictures on, or they may be applied to the center piece on the ceiling. When thus applied to the interior of the house, the means of rotating them may be dispensed with, but a plurality of rows of holes may be used, so as to spread the water over the entire area of the room. By the use of suitable stop-cocks the application of the water may be confined to one or more of the rooms, as may be necessary, according to the location of the fire, which may thus be checked in its incipiency and a conflagration averted as well as damage by flood in parts of the house where the fire is not burning.

My system can also be effectively applied to the roofs of houses and large buildings, in which case I may turn the pipe, as before described, or use tilting boards F, as shown in Fig. 4. In this device the perforated pipe B is furnished with collars G at suitable intervals, which are secured to brackets I, fastened on the apex of the roof. The board F is fixed to suitable brackets F′, journaled, as shown

at J. Cords K of suitable material are attached to the ends of one or more of these boards or to fixtures so attached to the pipe that they may be tilted, as desired, the cords communicating with either the interior or exterior of the building, as desired. By thus tilting the pipe or the board F from side to side the discharge from the perforations in the pipe may be delivered upon either slope of the roof, so as to flood it in case of fire.

By the use of the supplemental nozzles of a non-corrosive metal and counterboring or tapering them from the inside the jet-holes are prevented from changing in size or clogging by rust and the jets are made smooth and even in discharge.

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

1. In a system of water-supply, a pipe having one or more rows of holes of decreasing diameters, said holes provided with counterbored bushings, and polygonal collars on the pipes adapted to receive a tool or device whereby they may be rotated.

2. In a system of water-supply for extinguishing fires, a perforated pipe connected with a source of supply and journaled on the apex of the roof of a building, and means whereby the discharge from the pipe may be directed to either slope of the roof.

3. A sprinkling device consisting of a pipe section or sections, having a line of perforations along one side, brackets by which said pipe is supported along the ridge of a house, a direction-board supported and turnable beneath the pipe with attachments to tilt the board and direct the discharge-jets to either side of the ridge.

In witness whereof I have hereunto set my hand.

ALEXANDER McGEOCH.

Witnesses:
GEO. H. STRONG,
S. H. NOURSE.