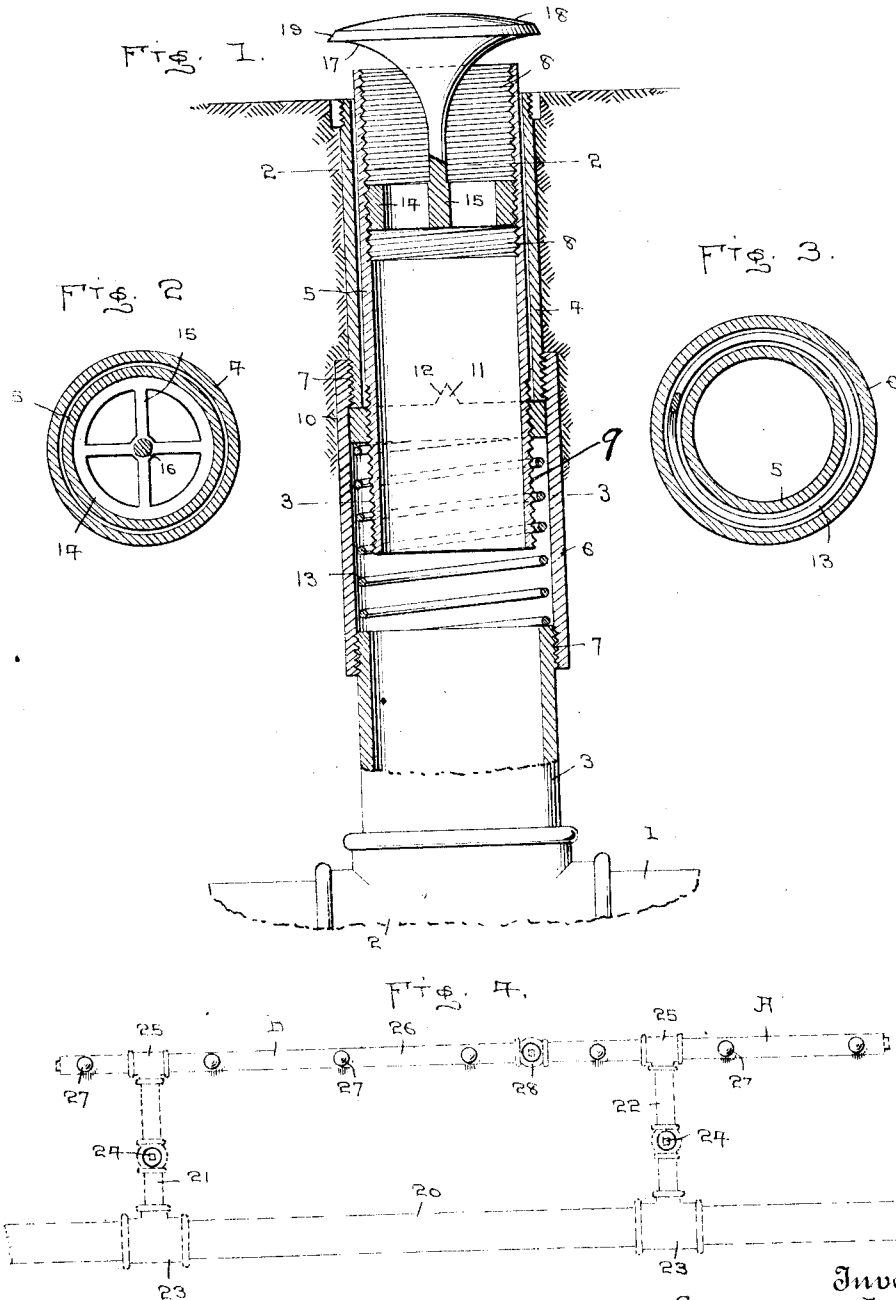


J. HOWARD.
STREET SPRINKLING DEVICE
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Patented Jan. 5, 1915.

1,123,746.



Witnesses

Frank Remy

C. V. Newbold

J. Howard

W. J. Fitzgerald

Attorney

UNITED STATES PATENT OFFICE.

JEWELL HOWARD, OF AMARILLO, TEXAS, ASSIGNOR OF ONE-FOURTH TO JOHN J. CRUME
AND ONE-FOURTH TO ROBERT S. KILLOUGH, BOTH OF AMARILLO, TEXAS.

STREET-SPRINKLING DEVICE.

1,123,746.

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To all whom it may concern:

Be it known that I, JEWELL HOWARD, a citizen of the United States, residing at Amarillo, in the county of Potter and State of Texas, have invented certain new and useful Improvements in Street-Sprinkling Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in sprinkler apparatus and has particular reference to that type of such devices as are peculiarly adapted for use in a street sprinkler system.

As its chief object, this invention contemplates the provision of an improved arrangement of water conductors by means of which streets may be quickly and thoroughly sprinkled.

A further object is to provide a structure which shall be capable of such adjustment that it will easily meet all needs and requirements and which will be adapted for use under any conditions which may arise.

A still further object is to provide a sprinkler which may be embedded below the surface of a street and whose projecting cap or sprinkler top will constitute no obstruction to the passage of vehicles upon the street.

An object of equal importance with the foregoing is to provide a sprinkling device of the type described, which is constructed with such regard to proportion, number and arrangement of parts as to be cheaply manufactured, will be durable and efficient in operation and may be readily installed with a minimum expenditure of time and labor and without requiring any alteration in the construction.

The above and additional objects are accomplished by such apparatus as are illustrated in the accompanying drawings, described in the following specification and then more particularly pointed out in the claim which is appended hereto and forms a part of this application.

With reference to the drawings, wherein I have illustrated the preferred embodiment of my invention as it is reduced to practice, and throughout the several views of which like characters of reference designate similar parts, Figure 1 is a vertical section of

my sprinkler as positioned below the surface of the street with the sprinkler cap projecting above said surface and in operative position. Fig. 2 is a horizontal section taken on the plane indicated by the lines 2—2 of Fig. 1. Fig. 3 is a similar view taken on the lines 3—3 of Fig. 1. Fig. 4 is a diagrammatic view of a system including a plurality of my sprinkling units.

In taking up the description of the structural features of my invention I will first have particular reference to Fig. 1 in which one of my sprinkling units is most clearly shown as an entirety.

The numeral 1 designates a water main of the usual construction located some distance below the surface of the street and provided with the three way union 2 in the upper part of which is positioned the supply pipe 3. The main portion of my sprinkling device comprises a fixed pipe 4 and a movable pipe 5 adapted for longitudinal displacement within said pipe 4. A suitable sleeve pipe 6 internally screw threaded as at 7 upon each extremity for a portion of the length thereof is threaded upon the lower extremity of the fixed pipe 4 and the upper extremity of the supply pipe 3 in such manner that a water tight joint is formed.

The slidable inner pipe 5 is internally screw threaded as at 8 for the portion adjacent its upper extremity and externally screw threaded as shown at 9 upon its lower extremity. The internally screw threaded ring 10 is threaded upon this lower extremity of the pipe 4 and is adapted to be embraced by the sleeve 6 in slidable relation thereto. On the upper face of this ring 10 I provide an upstanding inverted V-shaped extension 11 which is formed integrally therewith and which is adapted to engage in a correspondingly shaped notch 12 which is formed in the lower edge of the fixed pipe 4, said notch and said extension serving the purpose to be hereinafter clearly brought out. Suitable resilient means such as the expanding spring 13 is adapted to be positioned within the sleeve pipe 6 surrounding the lower extremity of the slidable pipe 5 and is adapted to bear upon the shoulder formed within the sleeve pipe 6 by the upper extremity of the supply pipe 3 and the said ring 10, forcing the said ring upwardly to bear against the shoulder formed in the upper portion of the sleeve pipe 6 of the

lower extremity of the fixed pipe 4. My removable sprinkler cap consists of an externally screw threaded wheel 14 provided with the integral spokes 15 and adapted to threadingly engage the internal screw threads 8 of my movable pipe 5. This wheel 14 has the integral stem 16 formed at the intersection of the spokes 15 and extending upwardly to project above the surface of the street. The upper portion of this stem 16 is arcuately and outwardly flanged as shown at 17 to form the circular cap 18. This cap 18 is provided with a slightly rounded top and it has the street contacting ends beveled as at 19 for the purpose to be hereinafter more fully described.

It will be apparent from the foregoing description when considered in connection with Fig. 1 of the drawings that I have provided a sprinkling device which is capable of a number of adjustments necessary to fulfill the above objects. It will be seen that the sprinkler cap which controls the flow of the water being sprinkled can regulate such flow by the mere rotation of the wheel 14 in the threads 8 of the movable pipe 5 and will thus admit of the egress of a greater or less quantity of water, whichever may be desired. The shape of the upper extremity of the stem 16 formed integrally with my sprinkler cap as also may be clearly seen in Fig. 1 will provide for the throwing or sprinkling of the water in every direction for a distance which is only limited by the pressure in the water main. It is also apparent that any vehicle in traversing the street in which my sprinklers are located and coming in contact with the upstanding sprinkler cap will not be jolted for the reason that the weight of the vehicle will force downward the whole slidable pipe 5 against the action of the resilient means 13 and that said resilient means will return the pipe 5 to its normal position immediately upon passage of the vehicle. A further adjustment of my device is in the matter of the projection of the slidable pipe 5 above the surface of the street and such projection can be made either greater or less as is desired by screwing the pipe upwardly or downwardly within the ring 10. This ring 10 being normally held against the lower extremity of the fixed pipe 4 and having its lug 11 in engagement with the notch 12 of said pipe, will be prevented from rotating as the pipe 5 is screwed upwardly or downwardly therein.

When it is desired that a number of my sprinkling units constructed as shown in the foregoing, be used in conjunction with one another as may be desirable at the intersection of two streets, a reference to Fig. 4 of the drawings will show a simple and

effective manner of carrying this out. In this figure 20 indicates city water main connected to the branch supply pipes 21 and 22 by means of the unions 23. These supply pipes 21 and 22 are provided intermediate their ends with the valves 24 and at their other extremities with the unions 25 which connect them to the distributing pipe 26. Assembled in operative position upon this distributing pipe 26 will be seen a number of sprinkler units 27 each of which is constructed exactly as the sprinkling device shown in Fig. 1. The distributing pipe 26 may be separated into sections by means of suitable valves 28 for the purpose of isolating one or more sections when it is desired to do so. If, for instance, it is desired that the section A shown in Fig. 4 shall distribute water and that the section B shall not, all that remains to be done is to close the valve 28 between the sections and the valve 24 in the supply pipe 21 so that no water is admitted to section B, leaving the valve 24 in the supply pipe 22 open, so that the sprinklers 27 located in section A of the distributing pipe will be provided with water.

While in the foregoing, I have illustrated in the drawings and described in the specification such combination and arrangement of elements as constitute the preferred embodiment of my invention, I desire to emphasize the fact that I may make such minor changes in the matters of proportion and degree, in later adaptations of my device as shall not alter the spirit of my invention as defined in the appended claim.

What I claim is:

In a sprinkling device, a vertically disposed fixed pipe having an upper open end and a notch formed in its lower edge, a sleeve pipe threaded on the lower end of said fixed pipe and connecting the same to a suitable source of water supply, a second pipe slidably positioned within said fixed pipe, a ring slidably positioned within said sleeve pipe and adjustable with relation to said slidable pipe, an extension formed upon said ring and adapted to fit within said notch preventing rotation of said ring, a distributing cap adjustably positioned above said slidable pipe for controlling the flow of water and resilient means for normally holding said ring against the lower abutting edge of said fixed pipe.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JEWELL HOWARD.

Witnesses:

S. F. RUSSELL,
F. A. WINKLER.