

No. 616,032.

Patented Dec. 13, 1898.

F. STRUHS.
LAWN SPRINKLER.

(Application filed May 21, 1897.)

(No Model.)

Fig. 1.

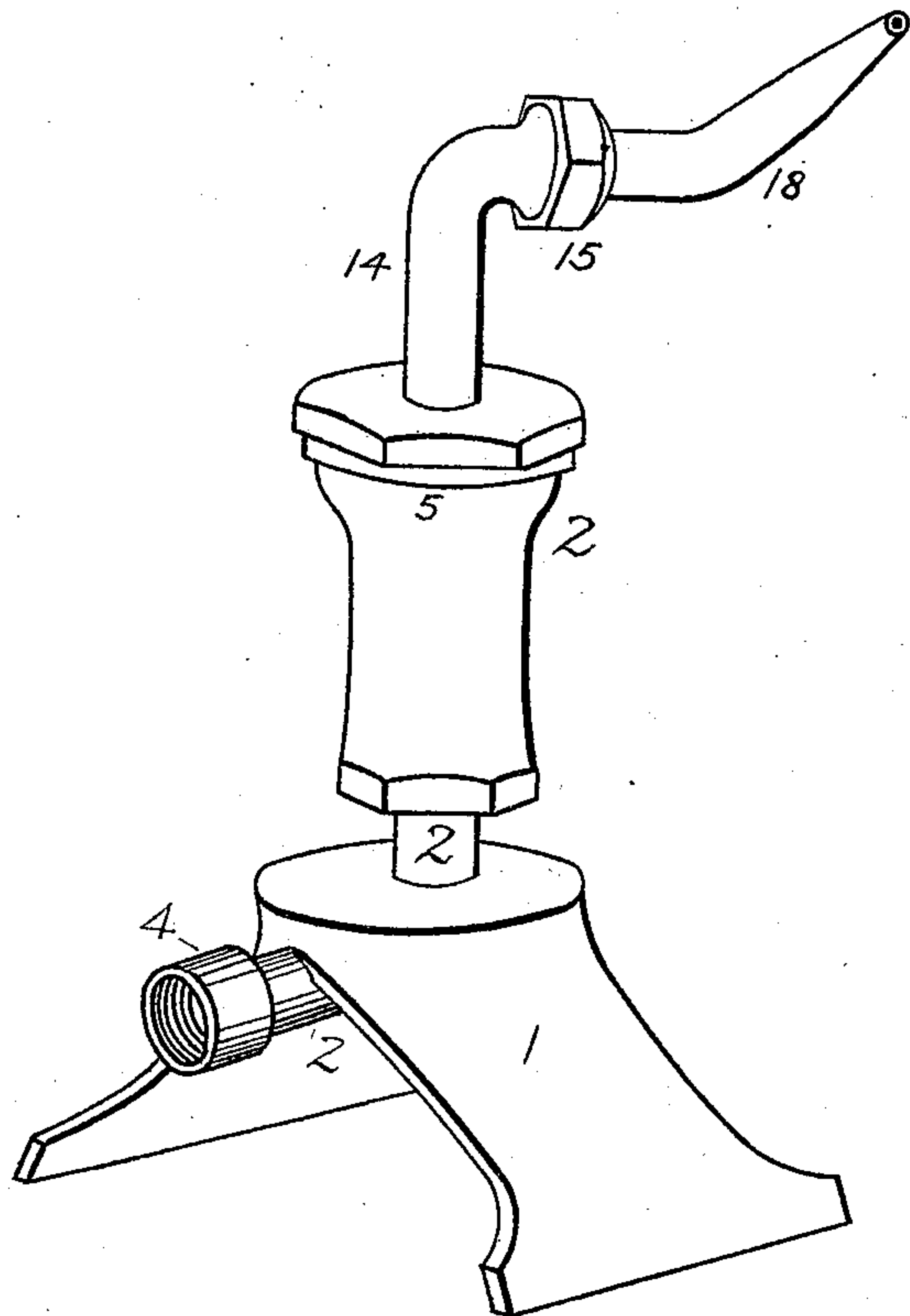


Fig. 2.

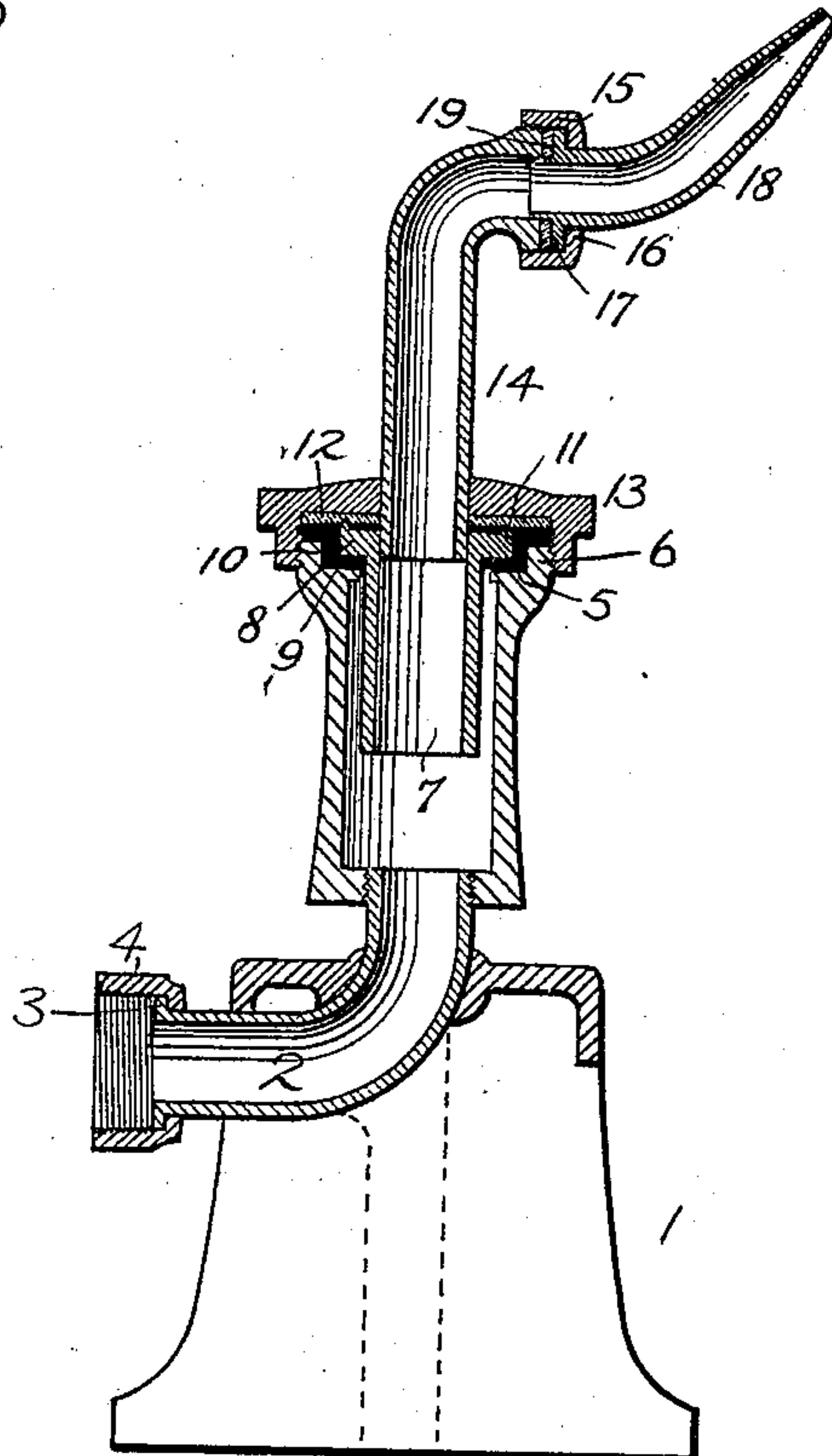
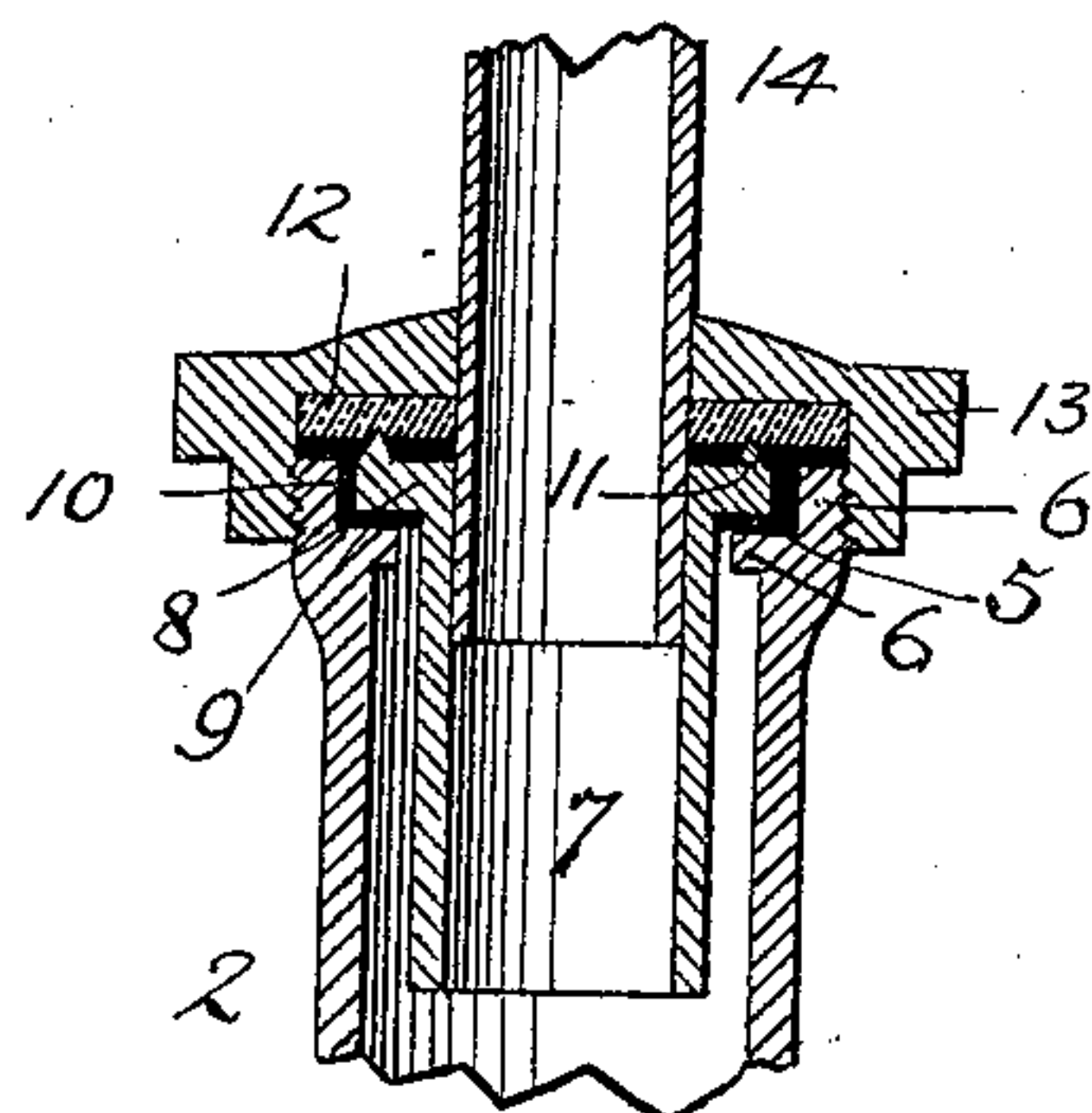


Fig. 3.



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UNITED STATES PATENT OFFICE.

FRANK STRUHS, OF GRAND RAPIDS, MICHIGAN.

LAWN-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 616,032, dated December 13, 1898.

Application filed May 21, 1897. Serial No. 637,534. (No model.)

To all whom it may concern:

Be it known that I, FRANK STRUHS, of Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and
5 useful Improvements in Lawn-Sprinklers; 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
10 the same.

The object of this invention is to provide a lawn-sprinkler which is comparatively simple and cheap in construction and also possesses the additional advantage of being effective in
15 operation, as the revolving discharge-nozzle will throw a stream a considerable distance, ending in a fine spray which covers a large area.

With the above ends in view the invention
20 consists in a lawn-sprinkler consisting of an elbow-coupling supported by a base and having an enlarged upper end with an internal annular recess and inwardly-projecting flange, a thimble located in the upper part of
25 the coupling and provided with a flange which rests within the annular recess, said thimble being held in place by washers, and a threaded cap through which passes an elbow-pipe connected to the thimble and carrying the nipple,
30 which is coupled thereto.

In the following specification I have entered into a detail description of my invention, reference being had to the accompanying drawings and to numerals which designate the
35 different parts, and what I consider to be the novel features of construction are specifically recited in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view of a
40 lawn-sprinkler constructed in accordance with my invention. Fig. 2 is a vertical sectional view through the device. Fig. 3 is a detail view of the thimble.

Referring to the drawings by numerals, 1
45 designates the base or support, which is made up of a casting or forging to present an ornamental appearance, having diverging legs widened at their lower ends to provide an increased bearing. To the top or circular portion of the base passes an elbow-coupling 2,
50 which is rigidly attached thereto and is provided at one end with an annular flange 3,

over which fits the threaded ring or hose-coupling 4. The upper end of the coupling 2 is enlarged, as shown, and provided internally
55 with an annular recess 5 and an inwardly-projecting flange 6, the said end being threaded exteriorly, as shown. Within the upper end of the coupling fits a thimble 7, having at its upper end an outwardly-projecting
60 flange 8, which rests upon a leather washer 9, a second washer 10 being interposed between the outer edge of the flange 8 and adjoining portions of the coupling. The flange portion of the thimble is provided with an annular
65 bearing-flange 11, that engages a corresponding recess therefor in a washer 12, seated within a threaded cap or nut 13, that holds the thimble in place by engaging the threads at the upper end of the coupling. The cap
70 and washer are provided centrally with an opening through which passes an elbow-pipe 14, that is rigidly connected to the thimble, and this elbow-pipe is enlarged at its outer end and threaded to be engaged by an inter-
75 nally-threaded coupling-nut 15, having an inwardly-projecting flange 16 at the end opposite the threads, which engages an outwardly-projecting flange 17, formed on the inner end of the nipple 18, the inner end of said nipple
80 being reduced to fit within the elbow-pipe to which it is coupled, a washer 19 being interposed to form a tight joint.

The nozzle of the lawn-sprinkler, consisting of the thimble, the elbow-pipe, and nipple,
85 is adapted to revolve within the elbow-coupling 2, the nipple being bent at an angle to form the turn or bend 19 therein, the outer extremity being tapered, as shown, to form a reduced discharge end.
90

In the operation of the sprinkler the nipple is turned at an angle, so that when the water is turned into the device it will act to revolve the nozzle by the stream which passes out of the nipple, forming a back pressure upon the
95 device. The stream is sent a considerable distance and breaks into a fine spray, covering a considerable area, and it will be noted that by turning the nipple the stream can be varied to cover a larger or smaller area, said
100 adjustment also changing the speed. It will also be noted that the only wear is upon the leather washers, the joint at this point being made tighter by the pressure of water thereon.

It will be noted, of course, that instead of supporting the coupling within a base, as illustrated herein, the same could be connected to a peg, which is sometimes employed in connection with devices of this character.

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

1. In a lawn-sprinkler, the combination with a support, of a coupling secured thereto, said coupling having an upper enlarged end with an annular recess within the same, a nozzle provided with a projecting flange seated within the recess and having an upwardly-projecting annular ridge, a cap embracing the nozzle and engaging the coupling, a washer located within the cap and having a recess which receives the ridge on the flange of the nozzle, and a bent nipple forming the terminal portion of the nozzle and adjustable with respect to the other part thereof, substantially as shown and described.

2. In a lawn-sprinkler, the combination with

a support, a coupling secured thereto, said coupling having an enlarged upper end provided with an internal recess and flange, a nozzle having a flange seated within the recess and provided with an upwardly-projecting annular ridge, a threaded cap or nut embracing the nozzle and engaging the upper end of the coupling, and a washer located within the cap and having a recess which is engaged by the ridge on the flange of the nozzle; together with a bent nipple forming part of the nozzle and adjustably connected to the main portion, and an internally-threaded nut having an inwardly-projecting flange which engages a flange on the nipple, substantially as shown and described.

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

FRANK STRUHS.

Witnesses:

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