

(No Model.)

J. BYLER.
LAWN SPRINKLER.

No. 538,727.

Patented May 7, 1895.

FIG. I.

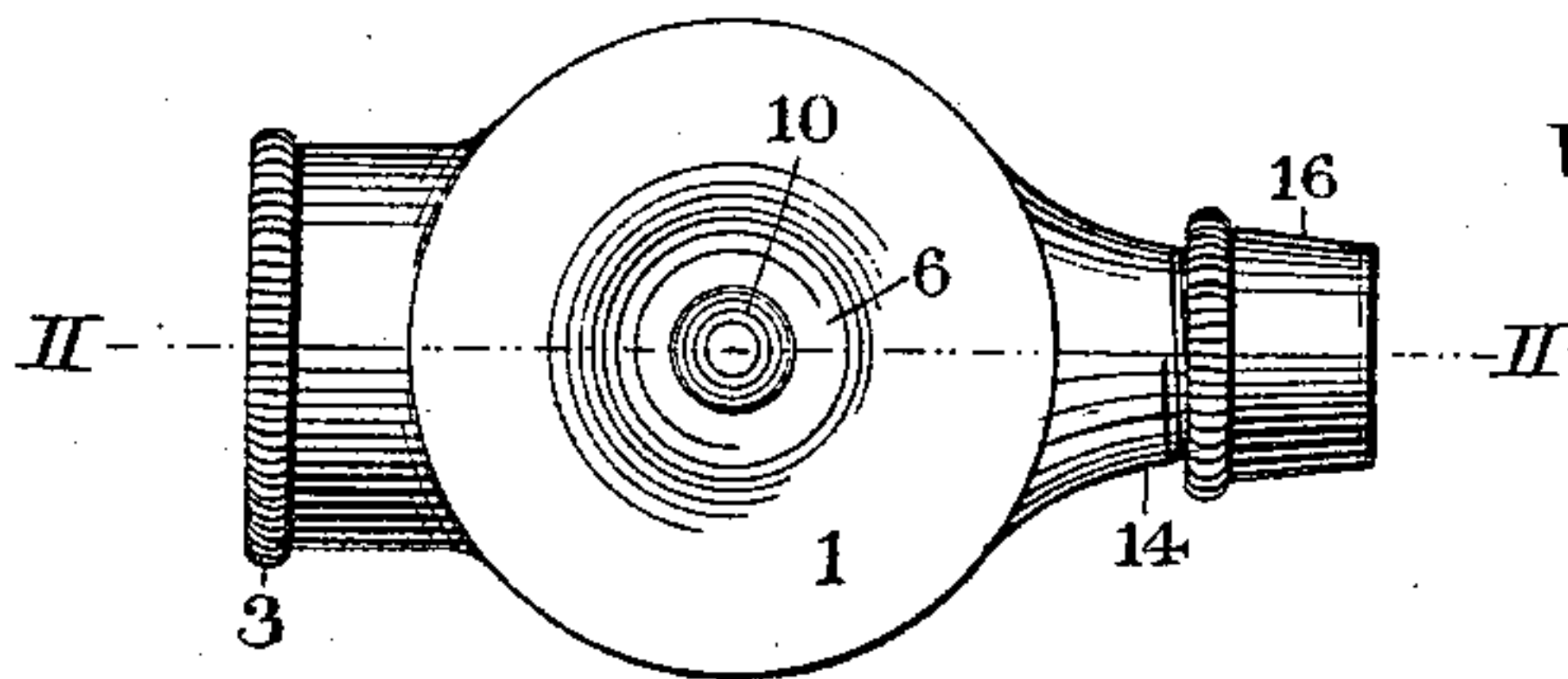


FIG. V.

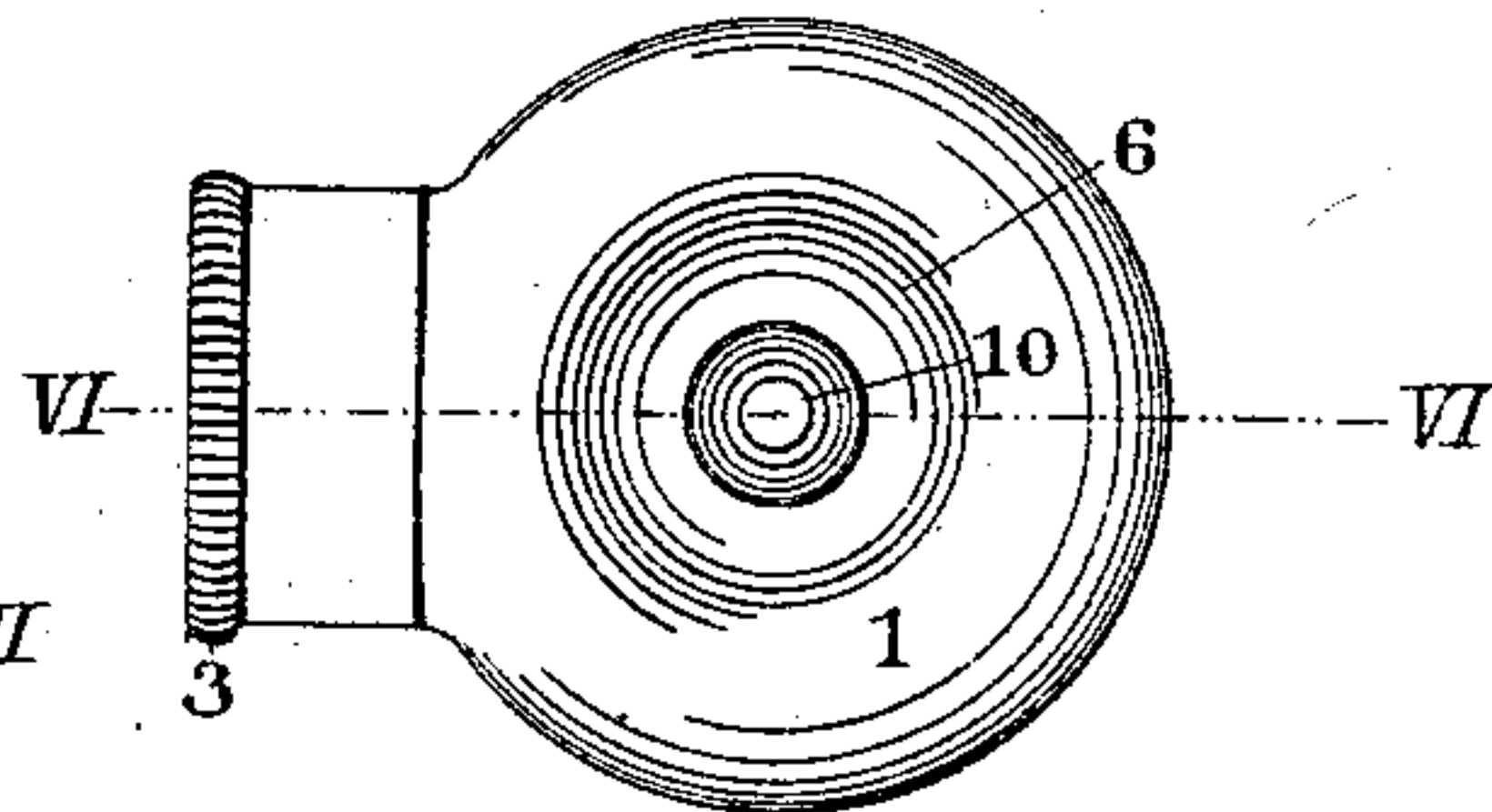


FIG. VI.

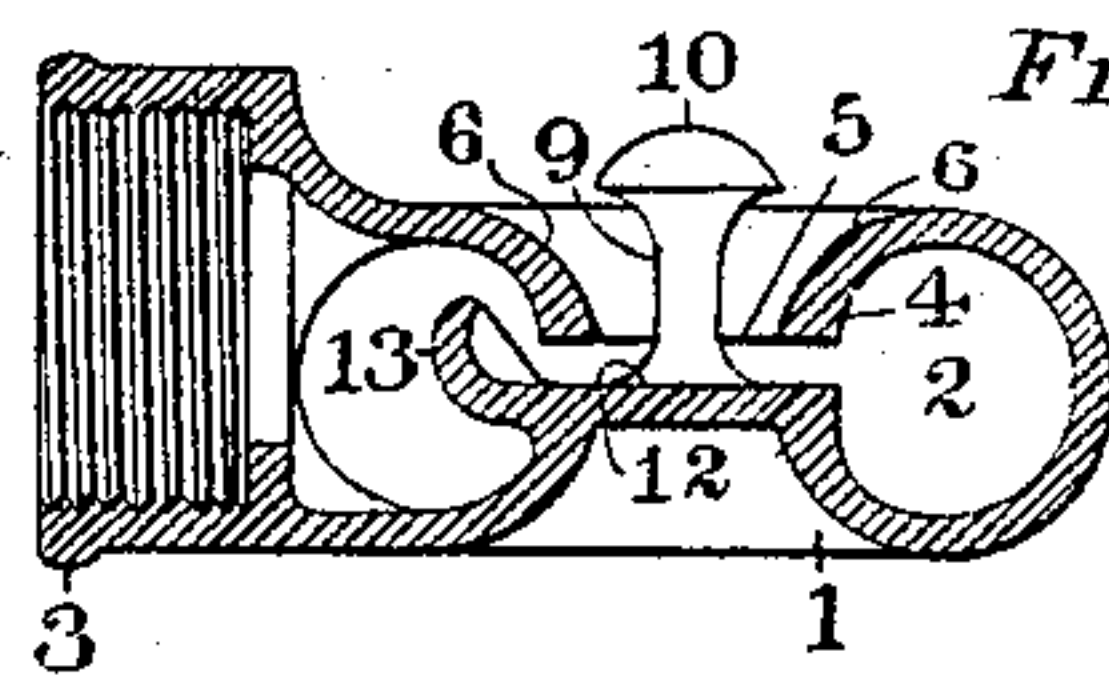


FIG. II.

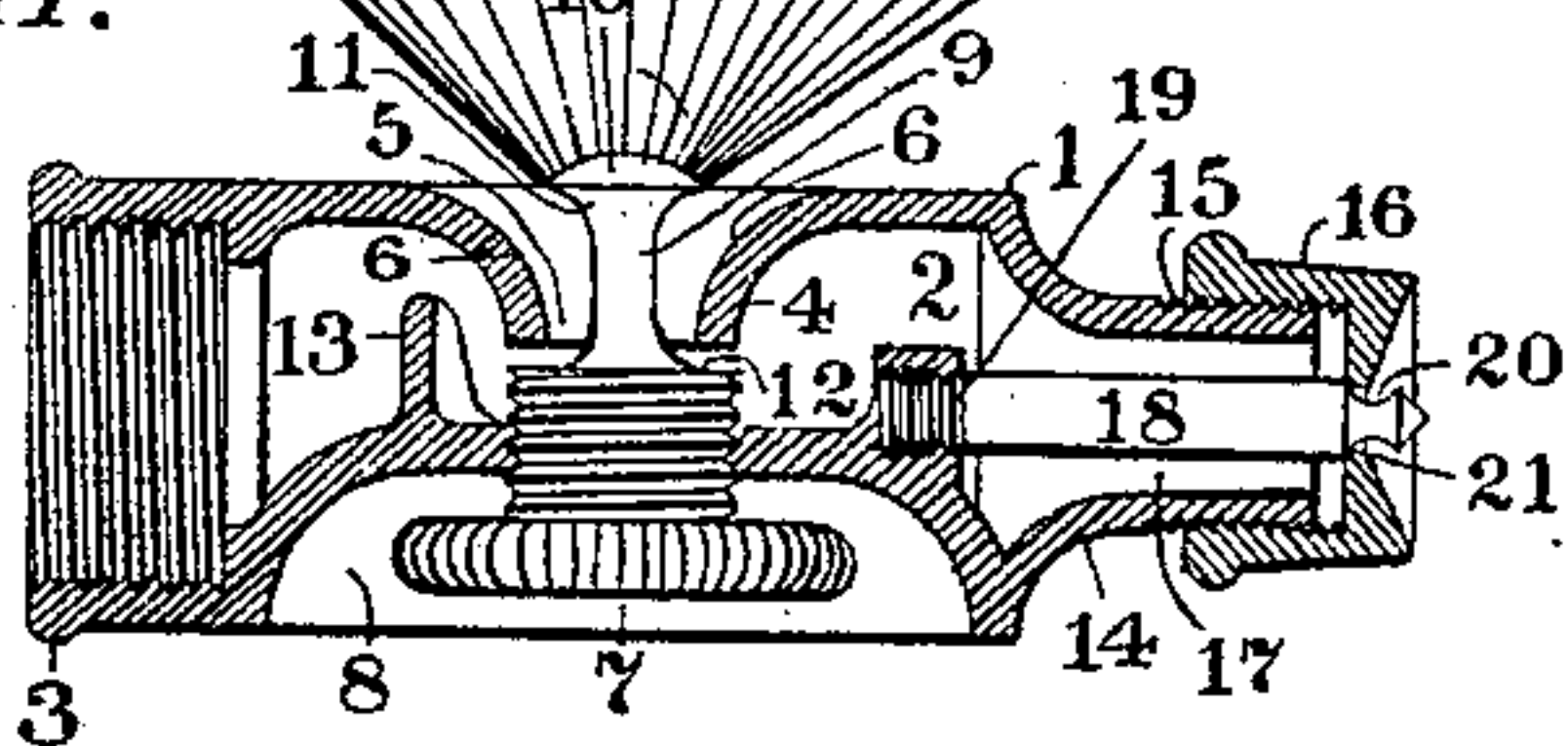


FIG. IV.

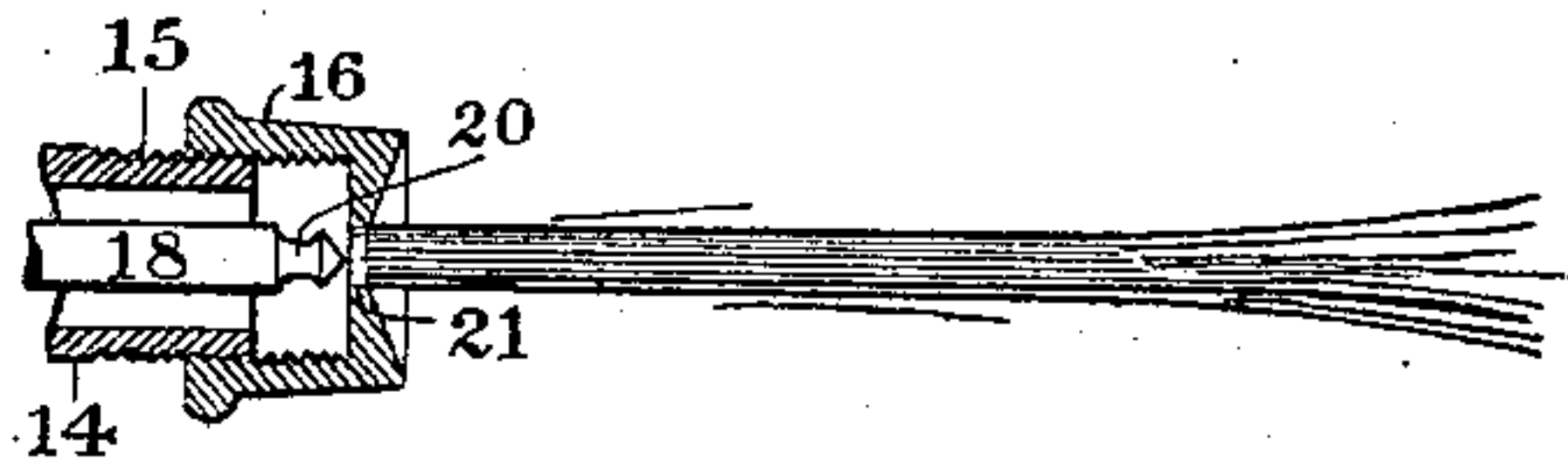
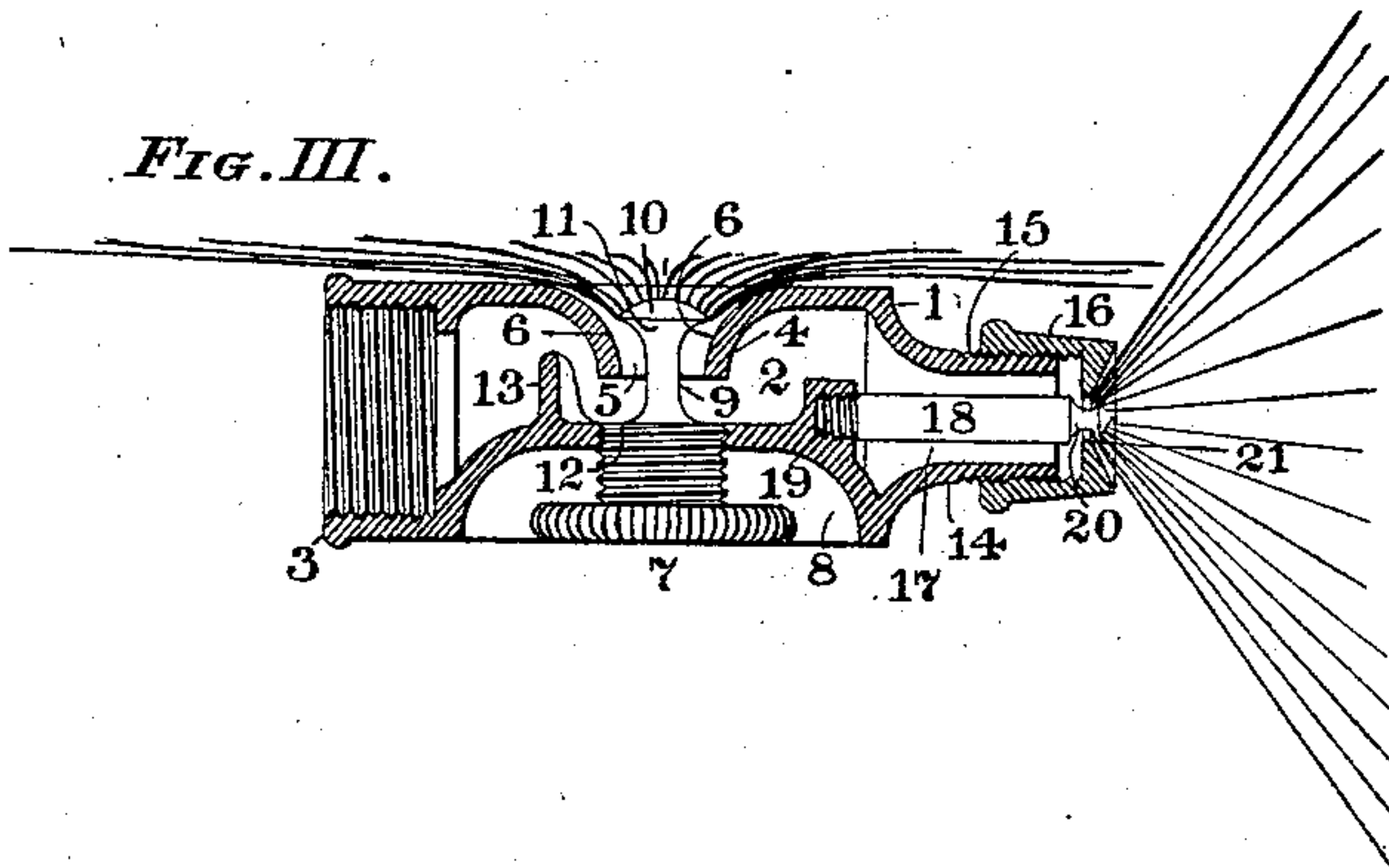


FIG. III.



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JONATHAN BYLER, OF LOS ANGELES, CALIFORNIA.

LAWN-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 538,727, dated May 7, 1895.

Application filed July 31, 1894. Serial No. 519,126. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN BYLER, of Los Angeles, county of Los Angeles, California, have invented certain new and useful Improvements in a Combined Lawn Sprinkler and Sprayer, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to an improved adjustable device for spraying and sprinkling lawns and which may be used for various other obvious purposes, and my invention consists in certain features of novelty herein after described and pointed out in the claims.

Figure I represents a top view of my improved device. Fig. II is a longitudinal section taken on line II II, Fig. I, showing one effect produced by the adjustment of the sprayer. Fig. III is a sectional view taken on the same line as Fig. II, but showing the sprayer and nozzle so adjusted as to produce a different effect. Fig. IV is a detail view showing the nozzle adjusted to throw a solid stream. Fig. V represents a modification, in which the sprayer is cast in one piece. Fig. VI represents a section taken on line VI VI, Fig. V.

Referring to the drawings, 1 represents the body having an interior chamber 2, into which the water passes from the hose or pipe to which the body may be attached, the body being so attached by means of its threaded or coupling end 3.

4 represents an annular cup-shaped flange on the upper side of the body 1, having its lower end extending downwardly into the chamber 2.

5 represents an orifice or passage through the center of the flange 4, through which the water is permitted to pass from the chamber 2.

The sides of the cup-shaped flange are preferably made flaring as shown at 6, thus constantly enlarging the area of the orifice 5.

7 represents a thumb screw, threaded into the under side of the body, the body having a recess 8, in which the thumb screw may be operated without extending beyond the lowest portions of the body, the thumb screw being thus protected and the base of the sprayer always having a smooth and level surface.

9 represents the spraying stem which is an

integral part of the thumb screw 7, and extends from the inner end of the same out through the orifice 5. The outer end of the stem 9 is formed in the shape of a circular cap 10, of somewhat larger circumference than the body of the stem. The surface of the stem is curved at top and bottom as shown at 11, 12, in order to deflect the water and give it the proper direction as it leaves the sprayer.

13 represents a deflecting flange located in the chamber 2 which receives the direct impact of the water supply, so that there shall be an equal pressure of water in the chamber 2, beneath the orifice 5, and an equal distribution of the same through said orifice.

14 represents the nozzle portion of the sprayer being threaded at 15, and having an adjustable cap 16 thereon. The nozzle is provided with a central aperture 17 for the passage of water and has centrally located thereon a pin 18, having its inner end preferably threaded into the body 1 at 19. The outer end of the pin 18 extends a short distance beyond the body of the nozzle and has its surface curved as shown at 20. The adjustable nozzle cap 16 has a central orifice 21 through which the water may pass.

In Figs. V and VI, I have shown a slight modification in which the spraying stem 9 is cast in one piece with the body. This modified form involves some of the same principles and would be a cheap non-adjustable form of my improved device.

The operation is as follows: By adjusting the spraying stem 9 in the orifice 5, I can regulate the discharge of water without shutting off the supply, can cause the water to fall at a greater or less radius from the sprayer and can spray vegetation close up to the body of the sprayer, said regulation being caused by the adjustment of the thumb-screw 7 to a greater or less distance from the lower end of the cup-shaped flange 4 (see Figs. II and III), or the orifice 5 may be entirely closed and the water shut off by turning the thumb-screw until it comes against the bottom of the flange 4. I can also so adjust the spraying stem as to cause the water to leave the sprayer in the form of a fine mist so light that the slightest current of air will cause it to drift like fog under similar circumstances.

I am thus able to spray the most tender plants without doing them injury.

The nozzle 14 may be operated in conjunction with the sprayer or either one of them may be operated independently as may be desired.

The nozzle may be adjusted to spray as shown in Fig. III, to sprinkle as shown in Fig. IV, or shut off entirely as shown in Fig. II by the manipulation of the adjustable cap 16.

I claim as my invention—

1. In a spraying device, the combination of the hollow body 1, having a cup-shaped flange 4 with a central aperture, a thumb-screw having a deflecting stem thereon and a recess in said body in which the thumb-screw operates, substantially as described and for the purpose set forth.

2. In a spraying device, the combination of

the hollow body 1, having suitable coupling means, supply and discharge apertures, a deflecting stem and deflecting flange 13 located in said hollow body adapted to receive the direct impact of the liquid and to raise its discharge onto the deflecting stem, substantially as described and for the purpose set forth.

3. In a combined sprinkler and sprayer, the combination of a body having a chamber with supply and discharge apertures a flange 13 for receiving the direct impact of the liquid, a deflecting stem for spraying and an adjustable nozzle for either sprinkling or spraying, substantially as described and for the purpose set forth.

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Witnesses:

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