(No Model.)

C. H. BAKER.

LAWN SPRINKLER.

No. 477,164. Patented June 14, 1892.

Fig. 1.

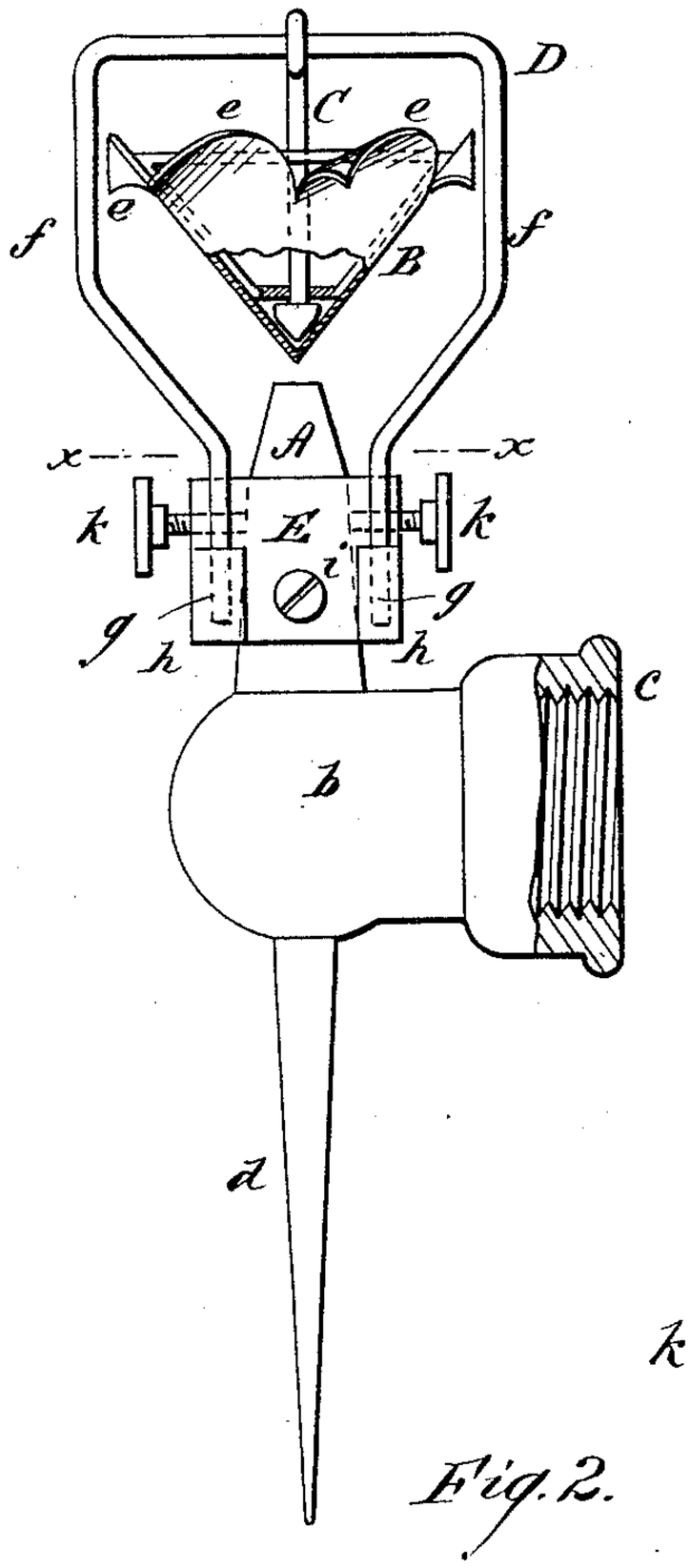


Fig. 3.

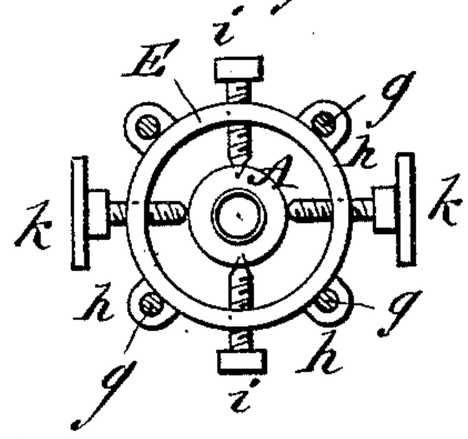
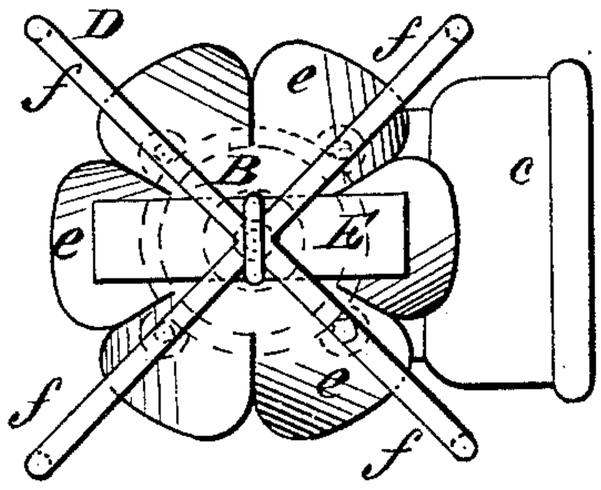


Fig. 2.



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CHARLES H. BAKER, OF BAY CITY, MICHIGAN.

LAWN-SPRINKLER.

SPECIFICATION forming part of Letters Patent No. 477,164, dated June 14, 1892.

Application filed September 11, 1891. Serial No. 405,385. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BAKER, of Bay City, in the county of Bay and State of Michigan, have invented a new and useful Improvement in Lawn-Sprinklers, of which the following is a full, clear, and exact description.

This invention relates to that class of lawn-sprinklers in which a rotary deflecting-cone provided with a series of distributing-wings is arranged above the discharge end of the nozzle of the sprinkler; and it consists in certain advantageous constructions and combinations of parts, substantially as hereinafter described, and more particularly pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a partly-broken side elevation of a lawn-sprinkler embodying my invention; Fig. 2, a plan of the same; Fig. 3, a transverse section in part upon the line *x x* in Fig. 1.

Referring, in the first instance, to Figs. 1, 2, and 3 of the drawings, A is the nozzle, having a lower body part *b*, provided with a lateral screw-threaded inlet *c* for connection with a hose for supplying the water to the sprinkler, and *d* is a leg projecting downward from the body part *b*, adapted to stick into the ground for holding the whole device in an upright position.

B is the rotary cone, made either of wrought or cast metal and of any suitable angle or shape on its exterior. This cone, which is arranged point downward over and at a proper distance from the discharge end of the nozzle A, so as not to cripple or interfere with a full stream of water through and from the nozzle, is provided on its exterior with distributing curved or angular corrugations, wings, or vanes *e*, integral with itself by casting or otherwise, as distinguished from a separate plate-distributer detachably secured to the cone. Such construction of combined cone and distributer is both simple and efficient. Said winged cone is mounted loosely on the lower end of a spindle C, which is rigidly secured above to a supporting-frame D. In this way the rotary cone has no extending bearings to produce friction and runs comparatively freely and noiselessly on the lower end of the fixed spindle and will not clog with sand or sediment.

The supporting-frame D, within which the winged cone is arranged to rotate, is constructed of any number of wires *f*, suitably bent to meet in the center at top, where the fixed spindle C is attached, and forming uprights or legs *g* below, which fit down within lugs *h* on the sides of a collar E. This collar is made of considerably larger interior dimensions than the upright or discharge portion of the nozzle, around which, below its tip, it is placed and to which it is pivoted by side screws *i i*, that provide for the cone being adjusted by set-screws *k k* either directly over the center of a stream of water issuing from the nozzle or to opposite sides of the stream. Such mode of attachment and adjustment of the tilting frame D, having the rotating cone within it, allows of the issuing water from the nozzle being deflected and broken or scattered in spray form by the rotary winged cone either in an entire circle of a diameter, dependent upon the force of the issuing stream, or by inclining or tilting the supporting-frame D more or less to either side. By suitably adjusting the screws *k k* the point of the cone may be adjusted to one side or entirely outside the stream of water issuing from the nozzle, and said water as it strikes the cone and its wings, having an angular set to the axis of the cone to secure the rotation of the latter, will be deflected and sprayed by the rotating cone over the whole area of an arc of a circle only—as, for instance, three-fourths of a circle, half a circle, or a quarter of a circle, as desired. This provides for spraying the water up to a walk or building without wetting the same, and the construction of parts is such that the spraying or sprinkling device may be used on a garden-hose nozzle of ordinary type.

The cone B as constructed will not be liable to spatter or throw the water downward and form a puddle around the sprinkler. The stream of water issuing from the nozzle is received on the point of the cone and on a convex conical surface and is symmetrically divided into an infinite number of smaller streams by the point of the cone. The tilt-

ing supporting-frame of the cone is securely locked or held in position when adjusted.

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

1. In a lawn-sprinkler, the attachment comprising a collar to embrace the sprinkler-nozzle and provided with pivot-screws and opposite set-screws at right angles thereto, an open frame secured to the collar, and a deflector supported within the frame, substantially as set forth.

2. In a lawn-sprinkler of the character herein described, the combination, with the stream-issuing nozzle, of an adjustable loose collar around said nozzle, pivot pins or screws applied to said collar and having their bearing in or on the nozzle, intermediate adjusting set-screws adapted to laterally tilt to opposite sides said collar on its pivots and to hold it in position, a revolving cone having angling wings on its exterior arranged above or over said nozzle, a fixed spindle carrying at its lower end said cone, and an open tilting supporting-frame carrying said spindle and carried by said collar, so as to be laterally adjustable in common with it, substantially as shown and described.

CHAS. H. BAKER.

Witnesses:
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