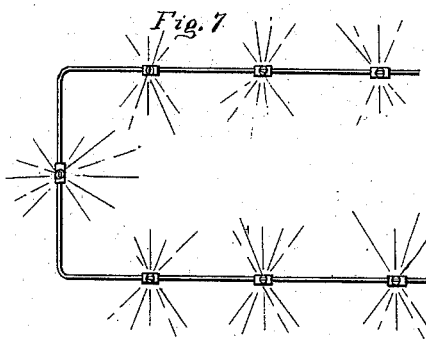
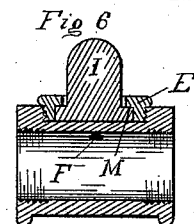
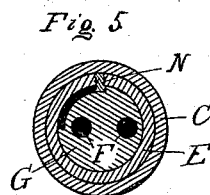
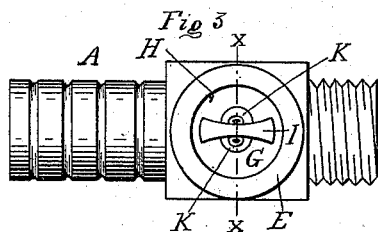
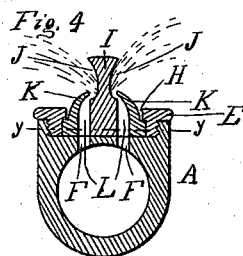
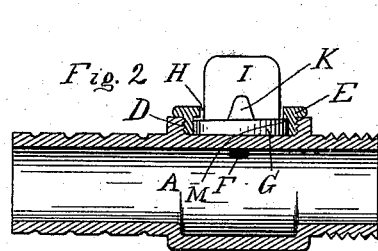
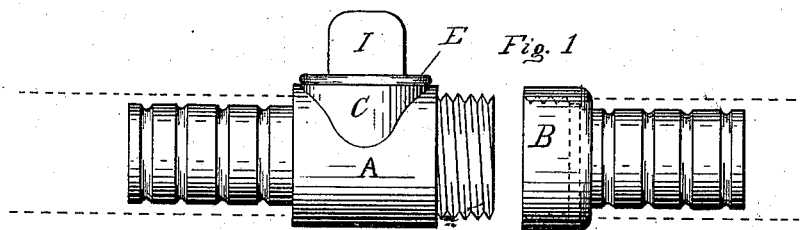


(No Model.)

E. J. H. RICHARDSON.
DEVICE FOR SPRINKLING LAWNS.

No. 385,069.

Patented June 26, 1888.



Witnesses:

R. M. Hulbert
John Schuman

Inventor:

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UNITED STATES PATENT OFFICE.

E. JENNIE H. RICHARDSON, OF DETROIT, MICHIGAN.

DEVICE FOR SPRINKLING LAWNS.

SPECIFICATION forming part of Letters Patent No. 385,069, dated June 26, 1888.

Application filed March 8, 1888. Serial No. 266,535. (No model.)

To all whom it may concern:

Be it known that I, E. JENNIE H. RICHARDSON, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Devices for Sprinkling Lawns, &c., of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to new and useful improvements in devices for sprinkling lawns, streets, &c.; and the invention consists in the peculiar construction and operation of a combined coupling and sprinkler whereby a series of watering-jets may be obtained at proper intervals along the whole length of a hose or pipe, all as more fully hereinafter described.

Figure 1 is a side elevation of a hose-coupling of ordinary construction to which my improvement is applied. Fig. 2 is a central longitudinal section through one part of the coupling. Fig. 3 is a plan of Fig. 2. Fig. 4 is a cross-section on line *xx* in Fig. 3. Fig. 5 is a cross-section on line *yy* in Fig. 4. Fig. 6 is an ordinary pipe-coupling provided with my improvement. Fig. 7 is a diagram showing a system of pipes provided with my improved coupling, as arranged for sprinkling lawns. Fig. 8 is a detail, specifically referred to in the specification.

In the accompanying drawings, which form a part of this specification, A and B are the two members of a hose-coupling of known construction, except as hereinafter described.

C is a hollow boss formed on the periphery of the part A.

D is an interior thread in the boss C.

E is a cap screwed into the boss C.

F is a hole or holes communicating from the boss C with the interior of the part A.

G is a disk loosely secured by the cap E in the boss C.

H is a circular aperture in the top of the cap E.

I is a thumb-piece secured to the disk G and projecting through the aperture H in the cap.

J are concave deflectors formed on the thumb piece I.

K are sprinkling-nipples formed on the top of the disk G.

L is the aperture of each of the nipples, which

is adapted to register with the aperture or hole F in the part A.

In practice the parts are intended to operate as follows: By means of the thumb-piece I the disk G can be rotated on its seat, so as to register the apertures in the sprinkling-nipples with the apertures F in the coupling, whereby, as the coupling forms a part of a pipe-connection with the water-supply, a jet of water is thrown through the nipples K against the concave deflectors J of the thumb-piece, producing an outwardly-curving spray. By giving the thumb-piece a quarter-turn the water-supply is shut off from the nipples, and to make the disk G close tightly to prevent any leakage I form the abutting shoulders M between the disk G and the top of the cap on an incline, which forces the disk G to close tightly against the apertures F. A suitable stop, N, may be arranged to limit the play of disk G to a quarter-revolution, as shown in Fig. 5.

I do not intend to limit myself to the number of sprinkling-nipples secured to the disk G. There may be one, two, three, or more, with a corresponding number of deflectors to throw the water in any desired direction, Fig. 8 showing a plan of an arrangement of three sprinkler-nipples with corresponding deflectors.

In Fig. 6 I show my same construction, as described, applied to an ordinary pipe-coupling of any of the various forms used for coupling iron pipe. It will be seen that a coupling thus constructed obviates a great deal of the constant attention required with ordinary sprinkling devices, which have to be changed from place to place, while with my device a stationary arrangement may be made either by using a series of couplings, as shown in Fig. 7, with an ordinary hose, so that a spray is obtained the whole length of the hose, or by constructing a stationary line of iron pipe which may inclose a lawn on the outside in the form of a fence, run around flower-beds, alongside of the streets, or in any other place where frequent sprinkling is needed, and by providing the pipe at suitable intervals with my coupling a permanent system of sprinkling is obtained, which obviates altogether the use of movable sprinkling devices, as shown in Fig. 7, where a whole section of lawn is shown to be covered by the

various jets placed at suitable intervals in the pipe in the form of my coupling.

What I claim as my invention is—

1. The combination, with the coupling member formed with a hollow boss, of the cap secured to said boss and provided with holes communicating with the interior of said member, and a sprinkling-nipple in said boss formed with an opening communicating with the interior
10 of the coupling, substantially as described.

2. The combination, with a pipe or hose coupling, of the boss C, formed thereon, the disk G, having the thumb-piece I and sprinkler-nipples K, the deflectors J, formed on the
15 thumb-piece I, and the retaining-cap E, all arranged substantially as and for the purposes set forth.

3. The combination, with a pipe or pipe-coupling formed with a boss, as described, of the cap fitted in said boss and communicating 20 with the interior of the pipe, and a disk, G, loosely secured in said boss by said cap and provided with sprinkling-nipples, and provided with a thumb-piece formed with concave deflectors, substantially as and for the purpose 25 specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 17th day of September, 1887.

E. JENNIE H. RICHARDSON.

Witnesses:

H. S. SPRAGUE,
P. M. HULBERT.