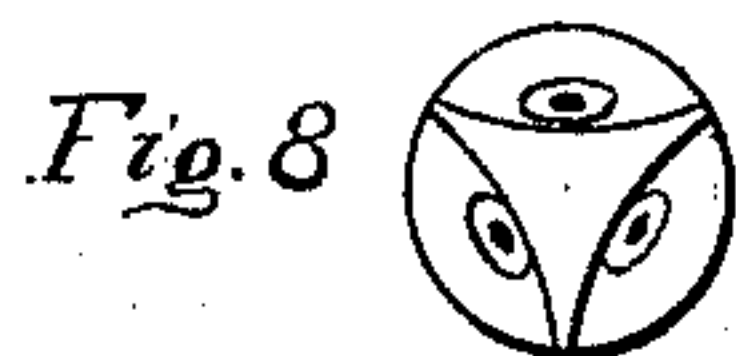
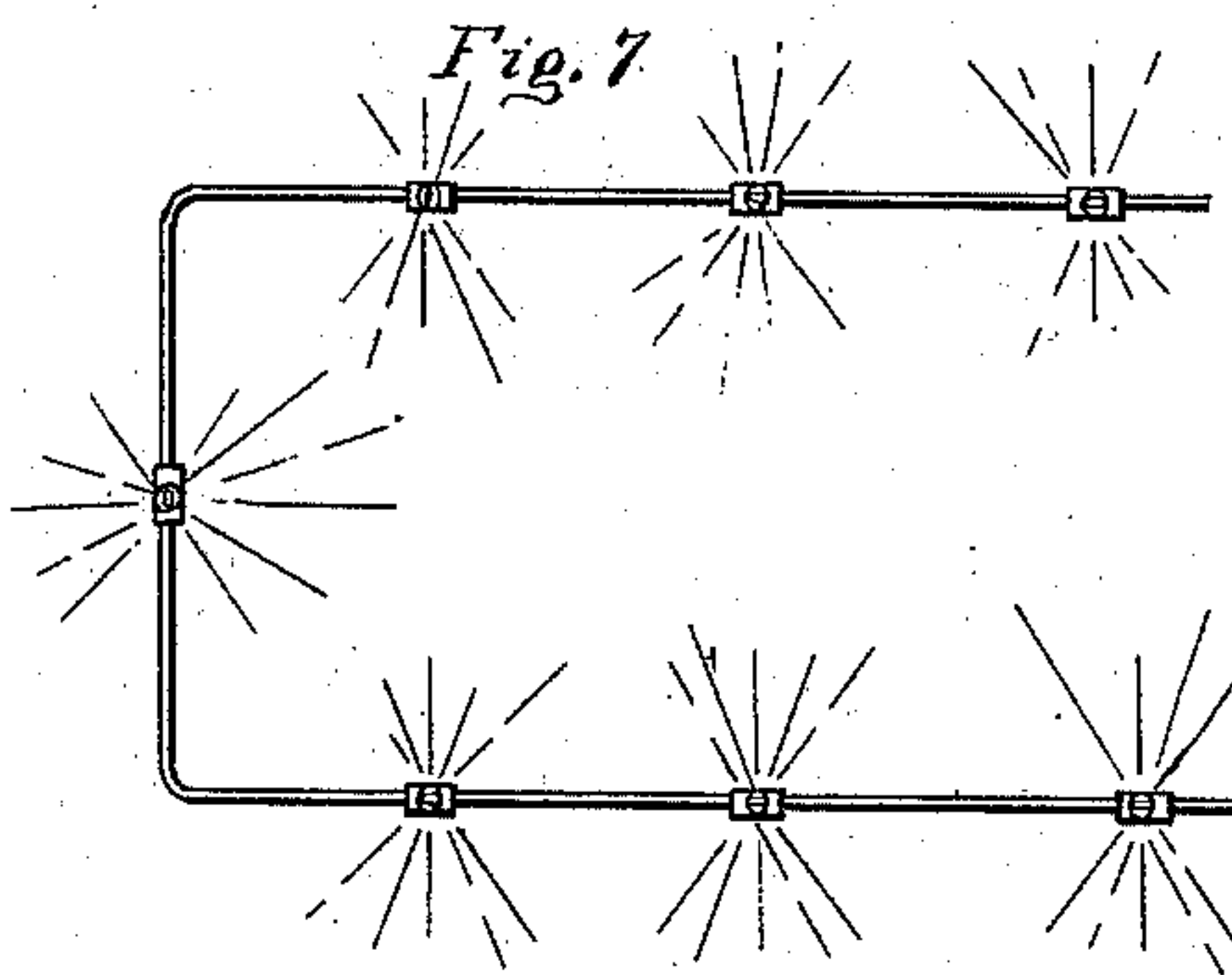
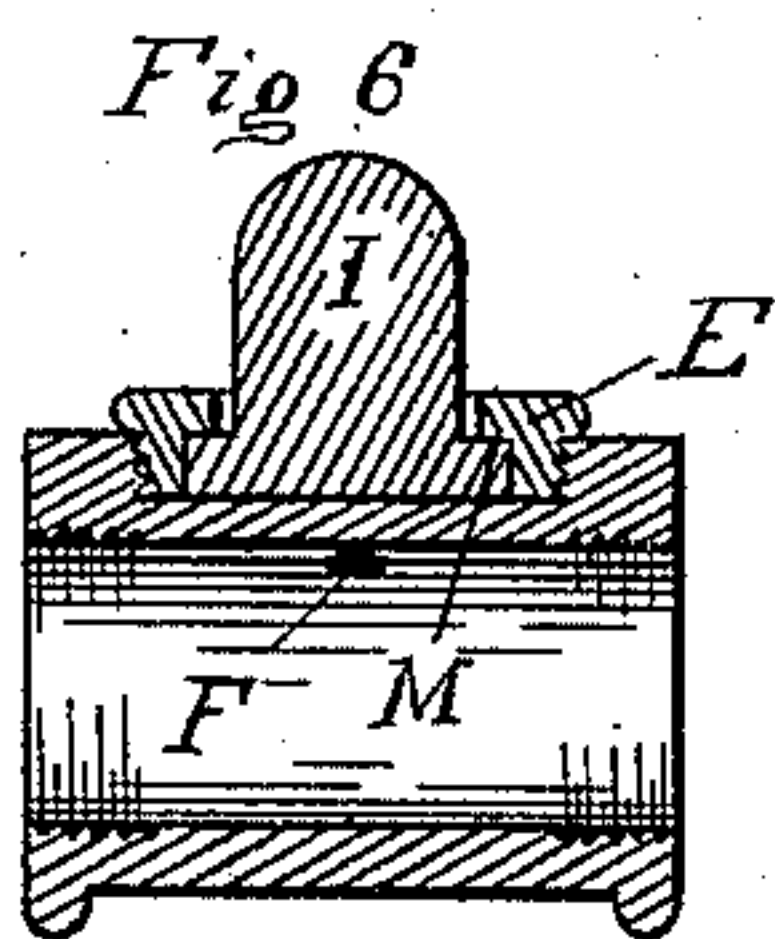
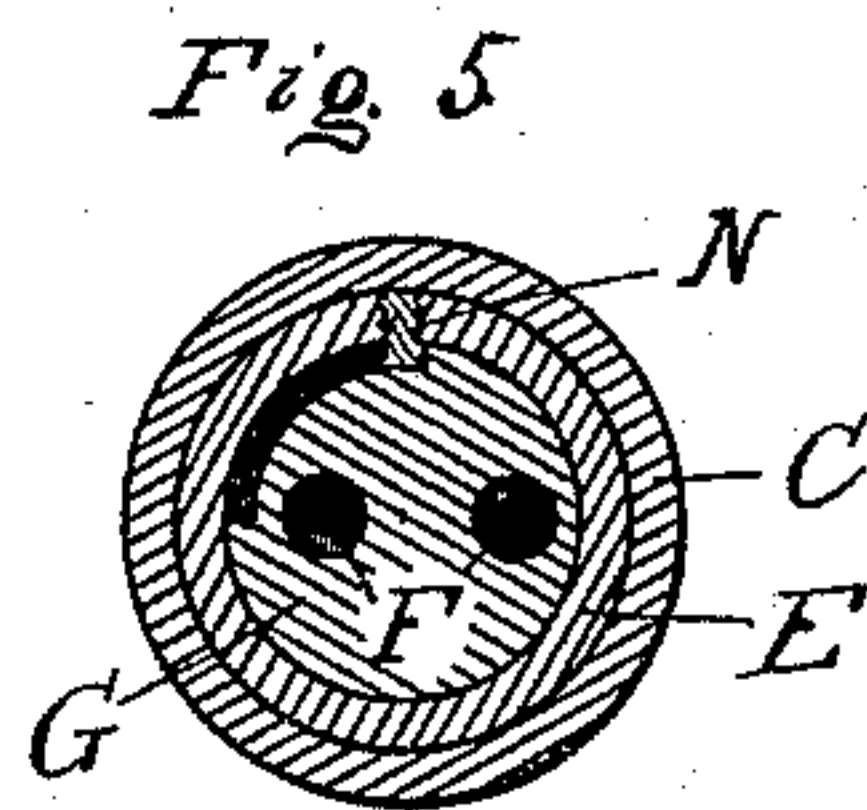
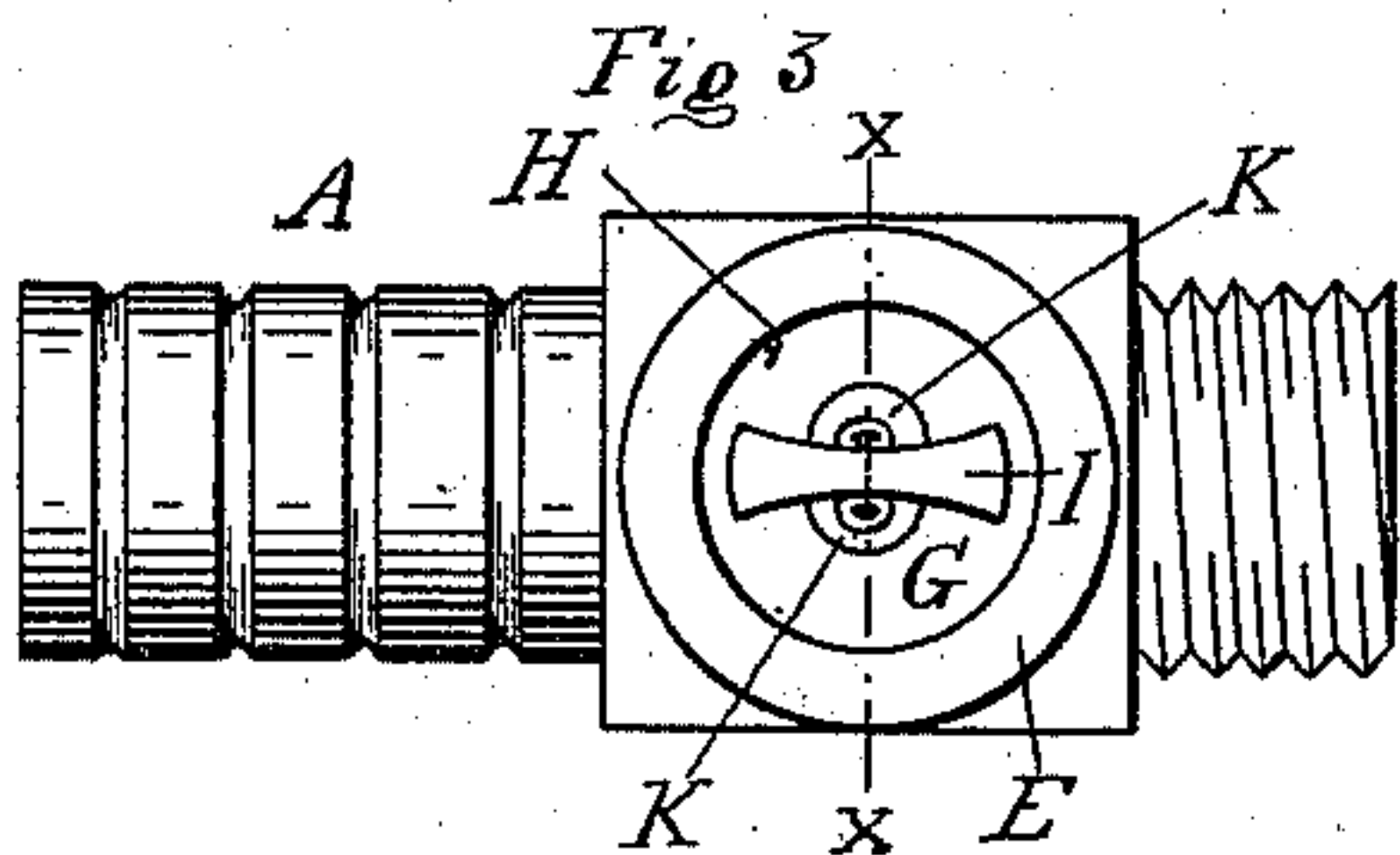
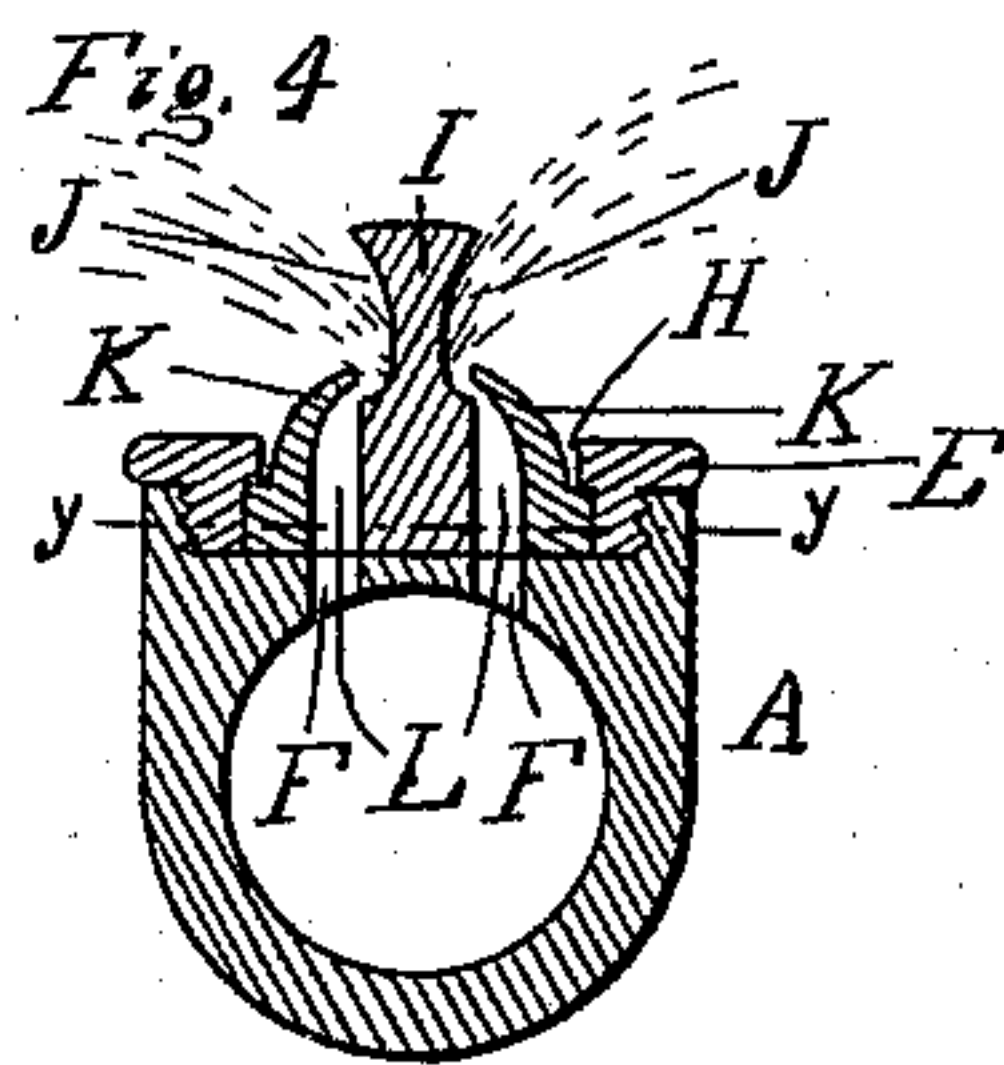
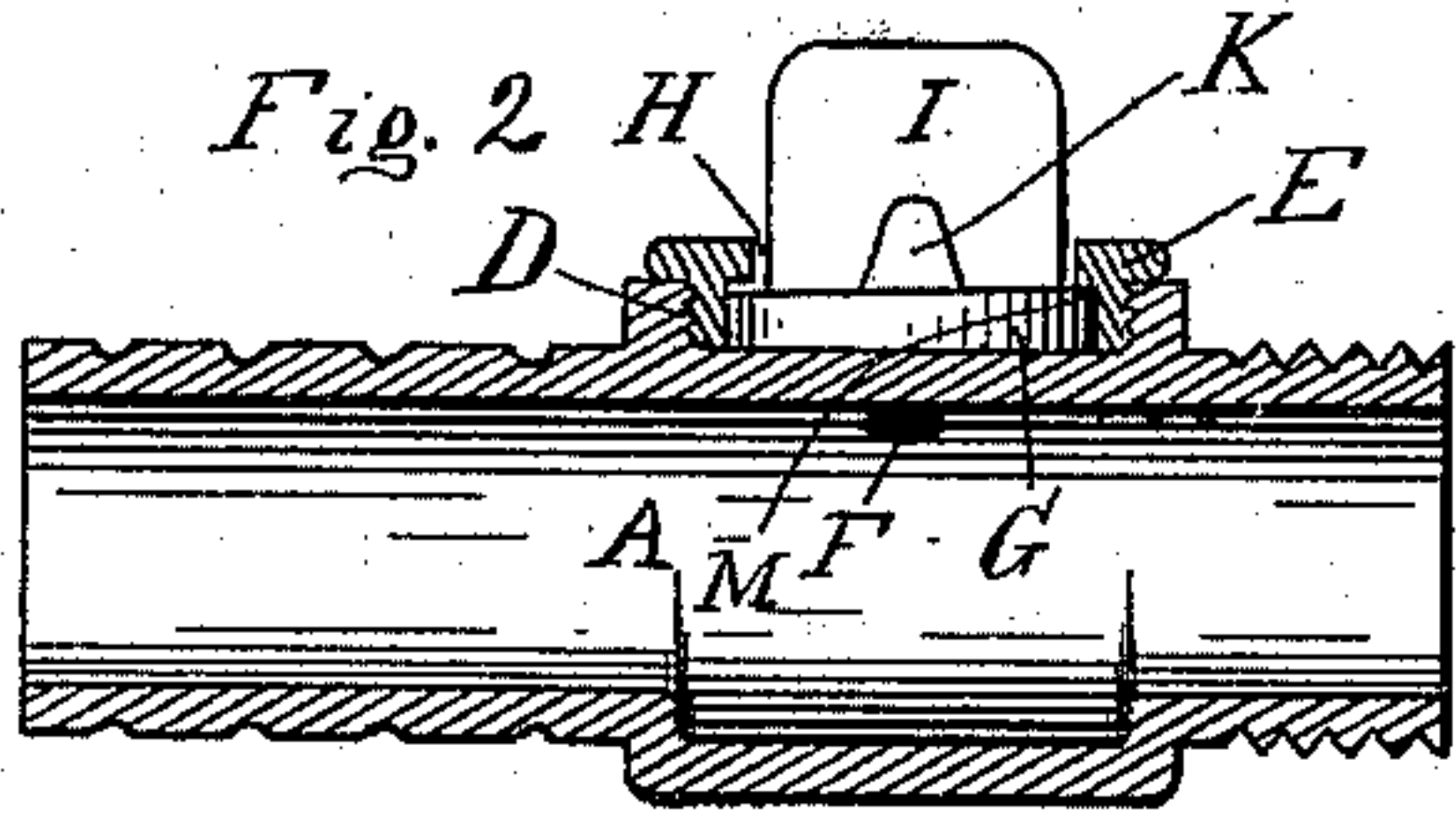
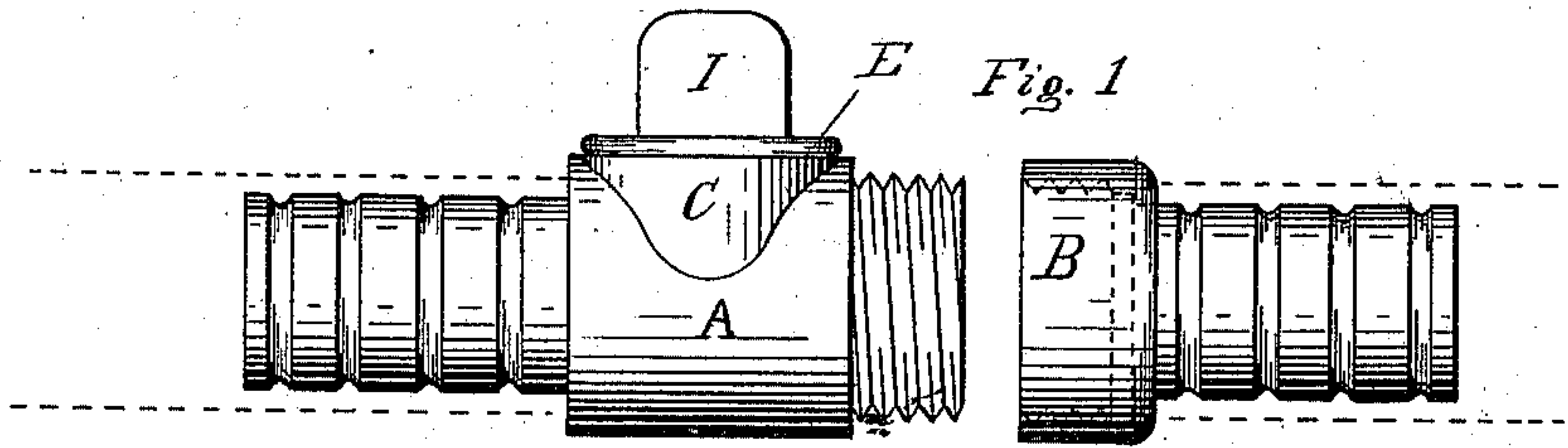


(No Model.)

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

No. 385,069.

Patented June 26, 1888.



Witnesses:

A. M. Hulbert.  
John Schuman.

Inventor:

E. Jennie H. Richardson.  
By Thos. S. Sprague & Son  
Attys.



# 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 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 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 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 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.