

P. A. BOWEN.
Sprinklers.

No. 155,852.

Patented Oct. 13, 1874.

FIG. I.

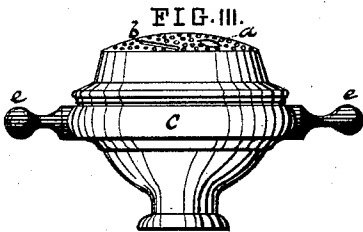
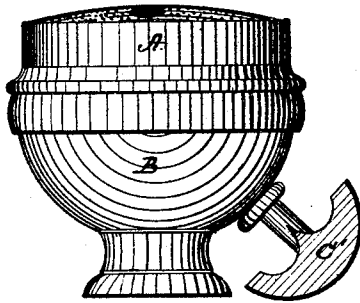
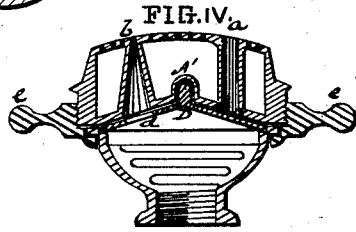
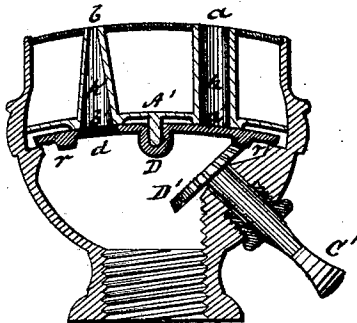


FIG. II.



WITNESSES.

Chas. H. Moxon
W. C. Chaffee

INVENTOR.

Philip A. Bowen
Per Atty.
A. H. Evans & Co.

UNITED STATES PATENT OFFICE.

PHILIP A. BOWEN, OF MILWAUKEE, WISCONSIN.

IMPROVEMENT IN SPRINKLERS.

Specification forming part of Letters Patent No. **155,852**, dated October 13, 1874; application filed July 27, 1874.

To all whom it may concern:

Be it known that I, PHILIP A. BOWEN, of Milwaukee, Wisconsin, have invented a new and useful Improvement in Sprinklers, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of my specification, in which—

Figure 1 shows a sprinkler with my improvements attached thereto, and Fig. 2 is a vertical section of the same. Figs. 3 and 4 are modifications referred to.

My invention relates to that class of sprinklers used in gardens and applied to the end of a nozzle; and it consists in the peculiar construction of the cap, as hereinafter explained.

In the drawings, A represents a hollow cap; B, the body; C, a coupling-ring; D, a cog-wheel meshing into the circular toothed wheel or ring *b*, secured to the plate B'. On the face of the cap A I make in number of small perforations, as shown in the drawings. I also make a large hole, *a*, through which to throw a solid stream of water. From this hole there is a small pipe, of corresponding size, leading to a similar hole, *a'*, through the bottom plate of the cap A. Hence, when *a'* is open, the flow of water is through the small pipe *p*, leading to the opening *a* in the face of the cap, and it passes out in a solid stream. On the face of the cap is also a slit, *b*, for throwing a flat stream or sheet of water, and this slit is connected with the under plate of the cap, by the pipe *p'*, to the opening *b'*.

It is evident that the water, entering *b'* and

passing through the pipe *p'*, will be discharged through the slit *b* in a flat stream or sheet; but if the water be allowed to enter the opening *c* or the slot *c'* in the plate A', it will pass through the hollow cap A, and escape through the small perforations in the face of the cap. Thus, through the same cap may be thrown a solid stream of water, or a flat stream, or the water may be divided into minute streams, as desired.

In the body B rests the plate D, through which are the ports *d*. This plate may be held tightly against the plate A' by a spiral spring, as shown in Fig. 4, and the cap may be revolved by means of the arms *e e* on the coupling-ring C; or the cap may be made stationary, and the plate D be revolved by any convenient means.

I prefer to cast on the under side of the plate D a circular toothed ring, *r*, into which meshes the small cog-wheel D', secured to the inner end of the shaft C'. By the shaft the plate D is readily revolved, so as to operate the sprinkler.

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

A sprinkler consisting of the cap A, perforated as described, and having the slit *b* and opening *a*, substantially as and for the purpose set forth.

PHILIP A. BOWEN.

Witnesses:

E. C. SMITH,
ROBT. RONE.