A. WEBER.

Hose-Nozzle.

No. 202,207. Patented April 9, 1878.

Fig 1

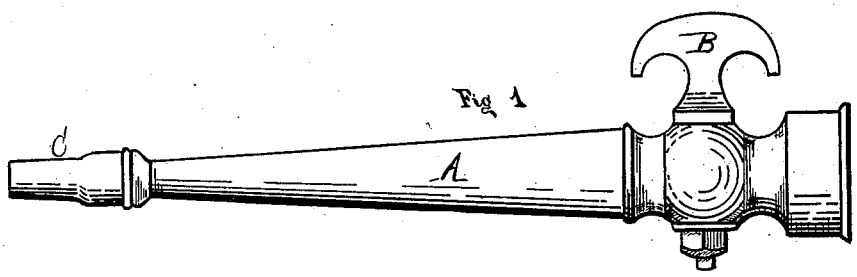


Fig 2

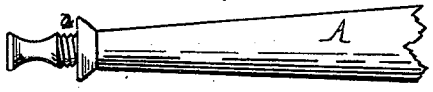


Fig 3

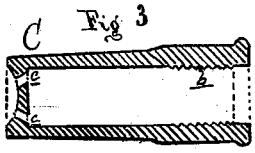
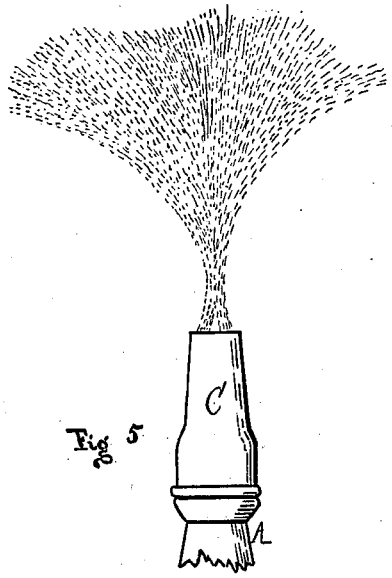


Fig 4

Fig 5



Attest

E. F. Sprague

Charles J. Hunt

Inventor

A. Weber

By Atty

Thos. S. Sprague

UNITED STATES PATENT OFFICE.

ADOLPH WEBER, OF DETROIT, MICHIGAN.

IMPROVEMENT IN HOSE-NOZZLES.

Specification forming part of Letters Patent No. **202,207**, dated April 9, 1878; application filed February 27, 1878.

To all whom it may concern:

Be it known that I, ADOLPH WEBER, of Detroit, Wayne county, in the State of Michigan, have invented an Improvement in Hose-Nozzles, of which the following is a specification:

The nature of my invention relates to new and valuable improvements in the construction of hose-nozzles; and the invention consists in the construction and arrangement of the parts, as more fully hereinafter set forth.

Figure 1 is a side elevation of my improved nozzle. Fig. 2 is a similar view with the cap removed. Fig. 3 is a vertical longitudinal section through cap and its perforations. Fig. 4 is a similar view with the cap in place. Fig. 5 is an elevation, showing my device as in operation.

In the drawings, A represents a nozzle of the ordinary construction, and provided with the usual valve or cock B. Near the point of the main nozzle there is cut upon it a thread, *a*, which is designed to engage with a female thread, *b*, upon the inner surface of the thimble-cap C. The top of this cap is slightly concave, as shown, and is provided with orifices *c*, tangential to the bore or axis of the main nozzle. When the cap is screwed in place upon the nozzle a chamber, *d*, is formed between the end of the nozzle and the top of the cap.

In the operation of this device the water forced through the bore of the nozzle is thrown with violence against the under side of the head of the cap, between the orifices; and it is necessary, in order to produce the desired result, that this imperforated portion of the head of the cap should present about the same area as is found in the smaller end of the bore in the main nozzle. The force of the stream against the head, as described, compels the water to divide and pass through the orifices *c;* and as they pass out of the same the currents follow the tangential line of the orifices until they meet, when such impact causes each current to repel the other, when the water falls in beautiful curves, spraying or sprinkling a large area of ground, as shown in Fig. 5.

I am aware that caps and rose-heads are employed in connection with nozzles, wherein the perforations are in the same parallel line with the axis of the nozzle. I therefore do not, broadly, claim perforated caps or heads; but

What I claim as my invention is—

1. In combination with a hose-nozzle, a cap provided with perforations tangential to the axis of the nozzle, substantially as and for the purposes set forth.

2. The combination of a hose-nozzle and cap, forming the chamber *d*, said cap being provided with tangential orifices through the head, and opening out of said chamber, substantially as and for the purposes set forth.

ADOLPH WEBER.

Witnesses:
H. S. SPRAGUE,
CHAS. J. HUNT.