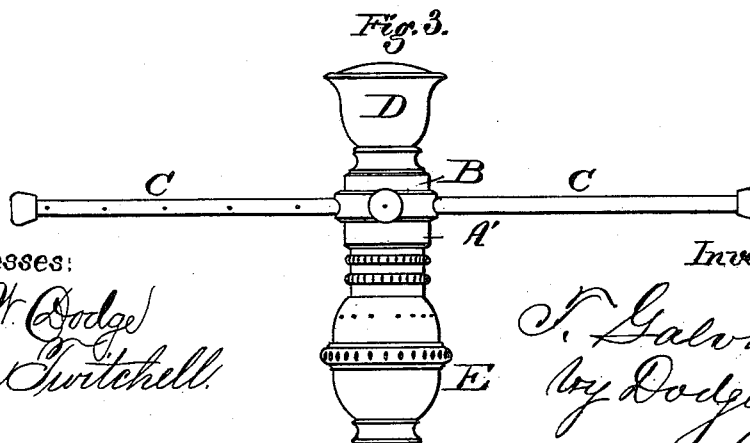
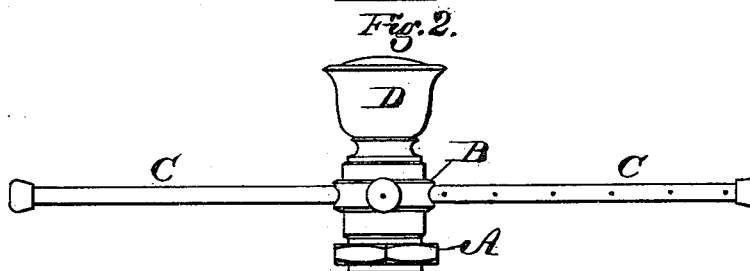
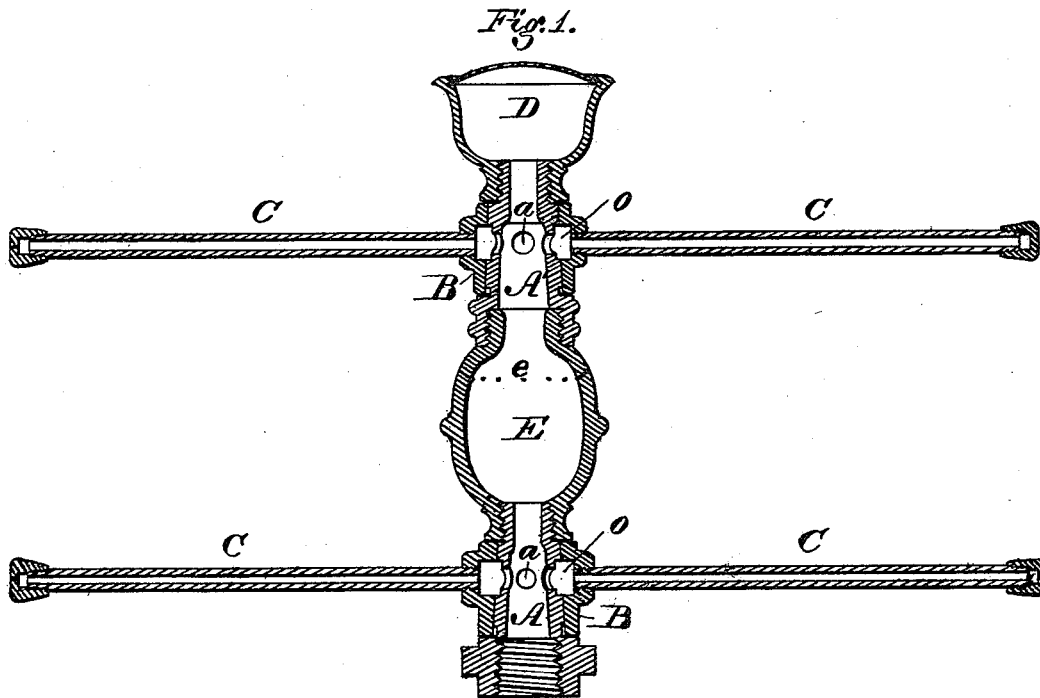


T. GALVIN.  
Ornamental Jets for Fountains.

No. 165,668.

Patented July 20, 1875.



Witnesses:  
Hill St. Dodge  
Donn Twitchell.

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# UNITED STATES PATENT OFFICE.

THADDEUS GALVIN, OF DETROIT, MICHIGAN.

## IMPROVEMENT IN ORNAMENTAL JETS FOR FOUNTAINS.

Specification forming part of Letters Patent No. 165,668, dated July 20, 1875; application filed June 5, 1875.

*To all whom it may concern:*

Be it known that I, THADDEUS GALVIN, of Detroit, in the county of Wayne and State of Michigan, have invented certain Improvements in Ornamental Jets for Fountains, of which the following is a specification:

My invention relates to fountains; and the invention consists in a novel construction of the parts constituting the jet or spraying device, as hereinafter more fully described.

Figure 1 is a transverse vertical section of the device using two sets of rotating arms, and Figs. 2 and 3 are side elevations of the same arranged to use a single set of arms.

The device constituting the subject of my invention is intended for use on fountains or lawn-sprinklers, as may be desired, and it is constructed in such a manner that either set of arms can be removed and the others used with equal facility.

In constructing my device, I provide a tubular plug, A, which has a screw-thread at its lower end, for securing it upon the supply-pipe. This plug A, as shown in Fig. 1, is made slightly conical externally, to receive a sleeve, B, which is fitted thereon with accuracy, but so as to turn freely. This sleeve B has an internal recess, *a*, forming an annular chamber, into which the water is admitted from the central bore of the plug A by a series of holes, *a*. Secured to the sleeve B is a series of radial tubular arms, C, whose inner ends connect with the chamber O, and they have a series of small holes opening out through one side, as shown in Figs. 2 and 3, by which, when the water is admitted, these arms, with their sleeve B, are made to revolve on the plug A. Upon the top of the plug A I fit a short tubular piece, E, which has one or more series or annular rows of small holes, *e*, as shown in Fig. 1, through which the water will escape in minute streams or jets. I have shown these holes *e* arranged to throw the water upward and outward; but, if desired, others may be made to throw the water in other directions, also. Upon the top of this piece E I then fit another plug, A', having a sleeve, B, and arms C fitted thereon, the same as below, the holes for the escape of the wa-

ter from the arms C being arranged on the opposite sides, so as to cause them to rotate in an opposite direction from those below. Upon the top of this plug A' I screw a sprinkler or perforated cap, D, the top of which, being provided with a series of minute perforations, permits the water to escape therefrom in fine jets, also.

When thus constructed, and placed upon a fountain or lawn-sprinkler, the device forms a beautiful ornament, the two sets of arms rotating in opposite directions, and throwing off fine streams of water as they move, while at the same time fine streams or jets escape from the holes *e* in the stationary part E, and also from the perforated top of the cap D, the whole forming a most beautiful spray, the streams or jets falling in graceful and varied curves.

It will be observed that the screw-joint on the top of both plugs A and A' are of the same size, and also that the orifice at the bottom of both are of equal size, so that, when desired, the part E, together with upper set of arms, may be taken off, and the cap D screwed on in their place, as represented in Fig. 2, and thus the device be used in that form; or either the upper or lower set be used with the cap and the part E, as represented in Fig. 3, thus enabling several different styles of jet to be formed from the one device. This also enables either set to be used alone whenever the other is injured or removed for repairs.

Having thus described my invention, what I claim is—

1. The compound fountain-jet, consisting of the two sets of rotating arms C, with the stationary part E and cap D, all constructed to operate substantially as described.

2. A jet for fountains, composed of a series of jets, constructed and united in sections, substantially as set forth, whereby the sections may be used separately or together, substantially as shown and described.

THADDEUS GALVIN.

Witnesses:

EDWARD C. SCHRODER,  
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