

No. 683,301.

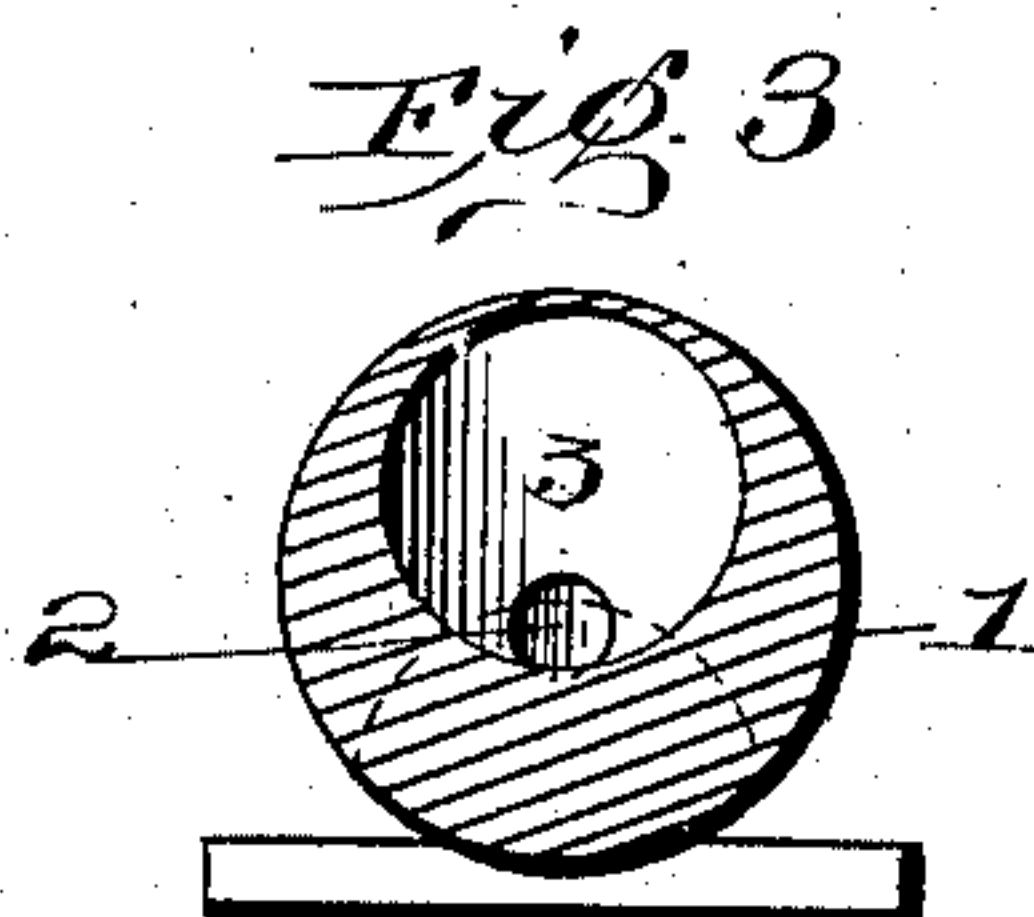
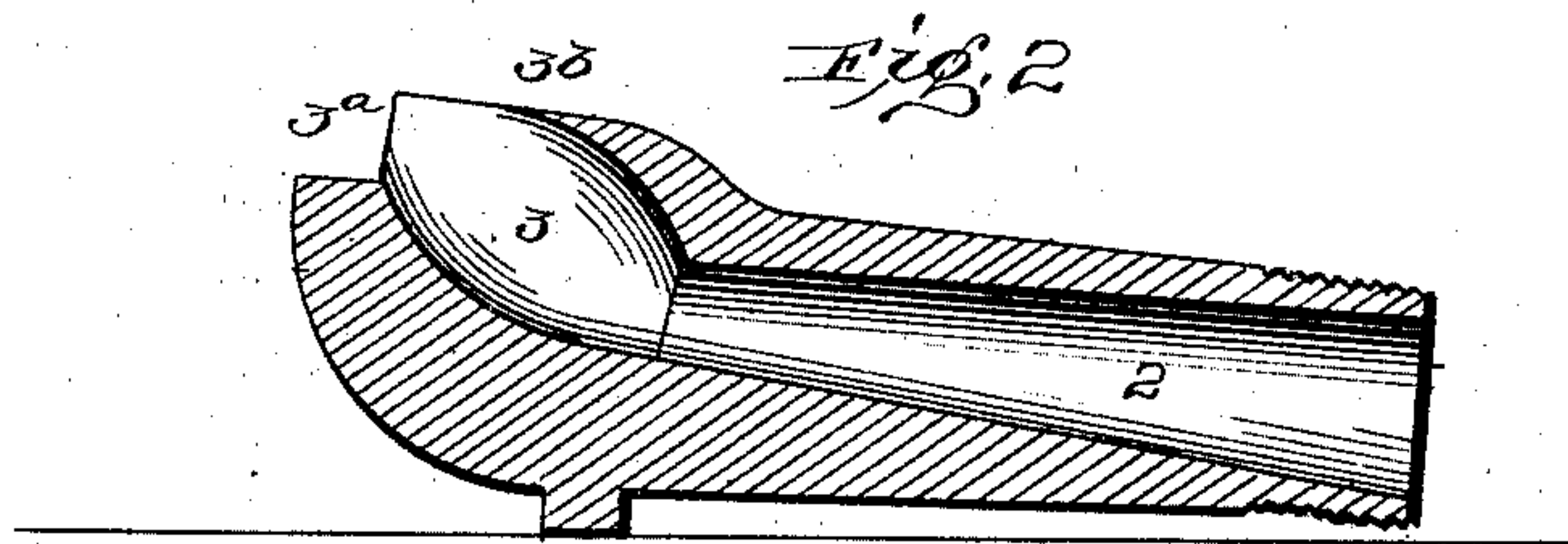
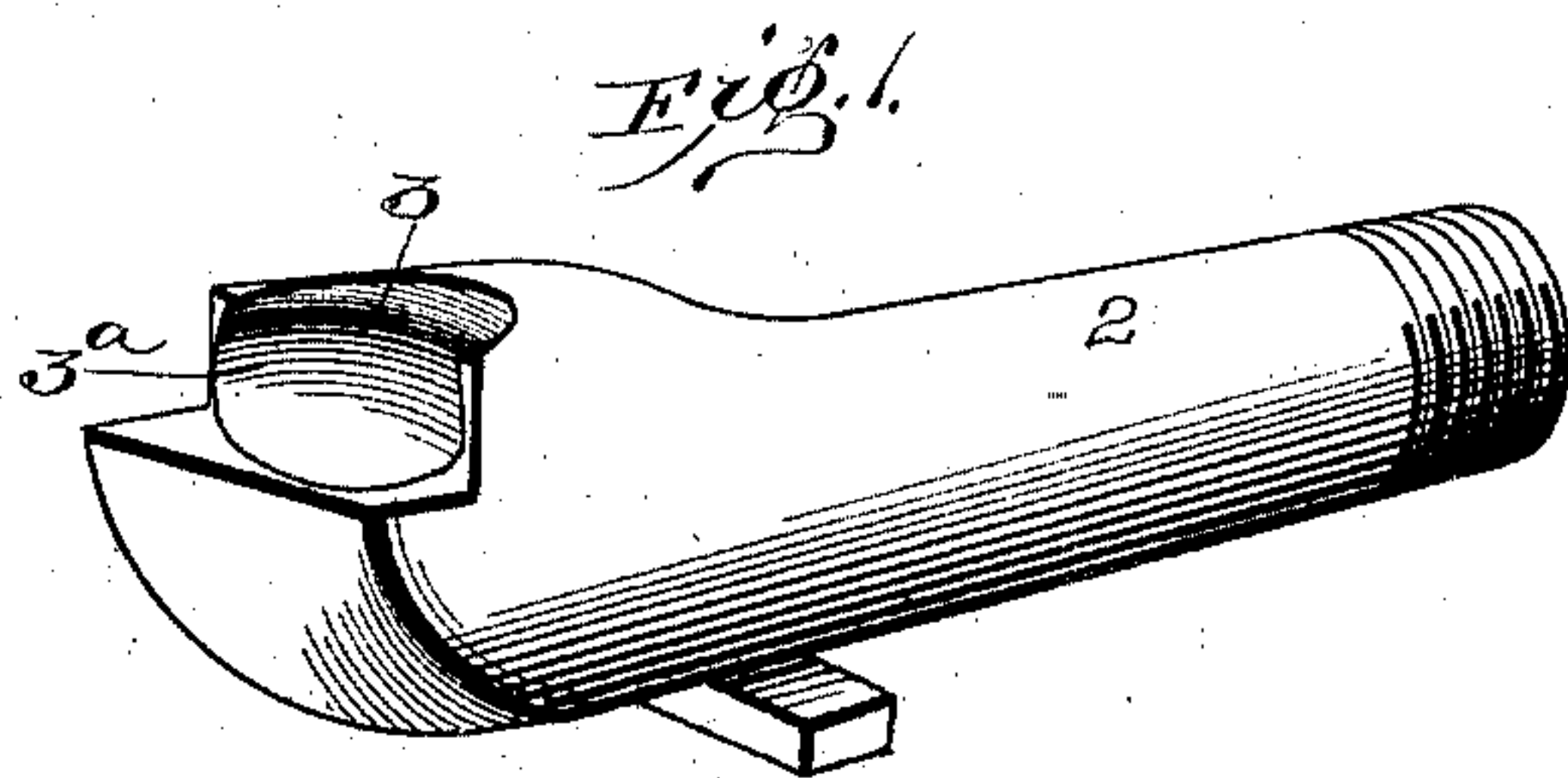
Patented Sept. 24, 1901.

D. F. LEAHY.

NOZZLE.

(Application filed Oct. 26, 1900. Renewed Aug. 3, 1901.)

(No Model.)



Witnesses:  
*J. M. Fowler Jr.*  
*Edw. J. Underwood*

Inventor  
*Daniel F. Leahy*  
by *L. J. Johnston*  
Att'y.

# UNITED STATES PATENT OFFICE.

DANIEL F. LEAHY, OF SAN FRANCISCO, CALIFORNIA.

## NOZZLE.

SPECIFICATION forming part of Letters Patent No. 683,301, dated September 24, 1901.

Application filed October 26, 1900. Renewed August 3, 1901. Serial No. 70,810. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL F. LEAHY, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Nozzles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved nozzle, more particularly for spraying or sprinkling purposes, as moistening or watering lawns, grass-plats, gardens, &c. It has for its object to reduce the water stream, and thus augment amount of the force thereof; also, to convert the thus-reduced portion of the stream into spray, the reduction of the stream and the initial formation of the spray all being effected within the nozzle itself.

It consists of the detailed construction and arrangement of the parts, substantially as hereinafter more fully disclosed, and specifically pointed out in the claim.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a perspective view. Fig. 2 is a longitudinal section. Fig. 3 is a cross-section through the sprayer of the nozzle.

In carrying out my invention I preferably cast the nozzle 1 in a single piece, it being adapted at its inner end, being screw-threaded, for attachment to a water-hose. (Not shown.) It may be of any suitable metal, as brass, aluminium, or even of wood of the hard kind.

The nozzle is formed with a bore 2 in its inner end, having a corresponding diameter with that of the hose to which it may be connected and tapering therefrom to a point a suitable or short distance inward from its

outer end to a diameter about half that of the inner end of said bore to effect the reduction of the water stream, thus augmenting the force thereof. Beyond this point, outward, said bore 2 is comparatively enlarged into a chamber 3, approximately spherical, being, however, elongated somewhat outward and flared laterally, as at 3<sup>a</sup>, as well as in its upper surface, as at 3<sup>b</sup>, forming, as it were, a hood. The bottom of said chamber forward of the delivery or reduced end 2 is gradually sloped upward and outward, terminating in a point above a line passing horizontally through said bore, whereby the water as it forcibly passes out through the end of the bore is caused to strike against said upward-sloped surface and be spread or sprayed upward and outward, as desired, for the purpose aforesaid. The hood portion of said chamber prevents the water or spray as its course is changed or deflected from being thrown back upon and wetting the operator holding the nozzle.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

A hose-nozzle having its bore tapered or converged to a given point and curved from, and in uninterrupted continuation of, its bottom surface, upward and forward of said point, and terminating above a line passing longitudinally through said bore, said bore also in front of, and in a plane above, said point having an upward and forward curved surface, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

D. F. LEAHY.

Witnesses:

LEE D. CRAIG,  
MATTHEW O. REILLY.