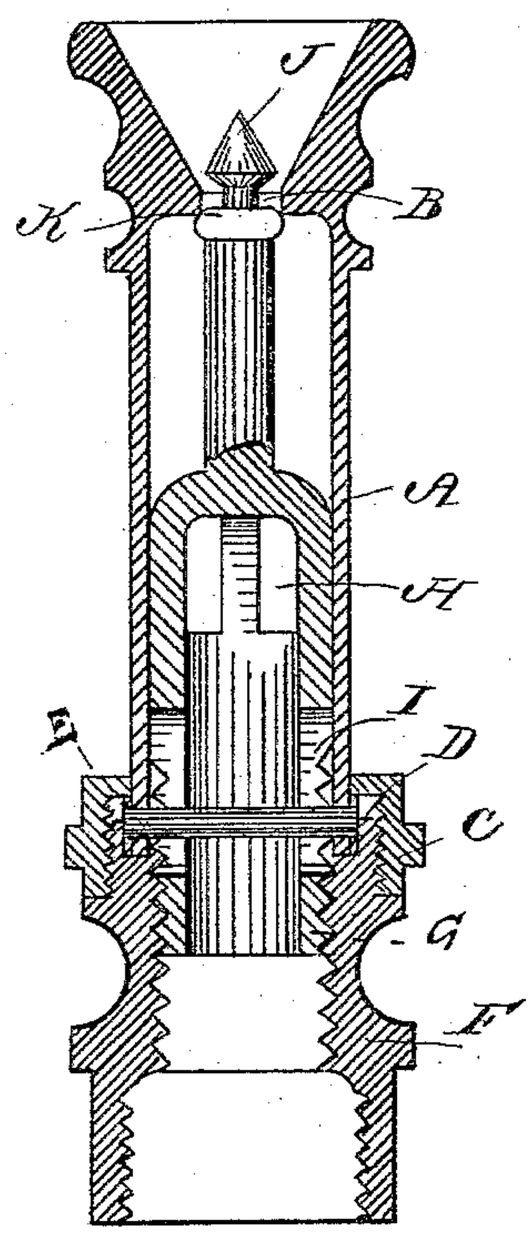
(No Model.)

E. R. TOMLINSON.

HOSE NOZZLE.

No. 319,148. Patented June 2, 1885.



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UNITED STATES PATENT OFFICE.

EDWIN R. TOMLINSON, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR TO THE EATON COLE & BURNHAM COMPANY, OF SAME PLACE.

HOSE-NOZZLE.

SPECIFICATION forming part of Letters Patent No. 319,148, dated June 2, 1885.

Application filed October 14, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWIN R. TOMLINSON, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Hose-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 certain novel and useful improvements in hose-nozzles; and it has for its object to provide a nozzle by means of which the water from the hose may be regulated and controlled so that it will issue either in the form of coarse spray, fine spray, or in a solid stream, and, furthermore, to provide a nozzle which may be readily turned to adjust the flow irrespective of the pressure of the water in the hose; and with these ends in view my invention consists in the details of construction and combination of elements hereinafter fully and in detail explained, and then specifically designated by the claims.

In order that those skilled in the art to which my invention appertains may more fully understand its construction and operation, I will proceed to describe the same in detail, referring by letter to the accompanying drawing forming a part of this specification, and which shows a central vertical section of my improved nozzle.

A is a sleeve of metal, provided at B with an opening for the exit of the water, and flaring outward from that point. The lower end of this sleeve passes through a threaded collar, C, and a metal band, D, secured to the extremity of the sleeve by pin E, holds it within the collar, but permits said sleeve to be readily rotated. F is also a sleeve, threaded externally at its upper portion to hold the collar C, and internally at its lower portion for attachment to the hose.

At the interior central portion of sleeve F is cut a thread having a steep pitch, and with this thread engages the threaded lower end of the spindle G. This spindle is hollow from its lower end to the openings H, from which point to its upper extremity it is solid.

At I are slots cut through the hollow body of the spindle, and the pin E, passing through them, holds the sleeve and spindle together so far as any rotary motion is concerned. The spindle is, however, capable of a longitudinal movement within sleeve A, as far as the pin E, sliding in slots I, will permit.

The conical head J of the spindle is of such size as to pass readily through the opening B, and the shoulders K are arranged to seat at the opening and so entirely close the same.

The operation of my invention is as follows: As will be readily understood, the turning of sleeve A, and the consequent rotation of the spindle within, will cause the head of the latter to be either drawn back from or protruded through the opening B. When drawn back through the opening and within the sleeve as far as the movement of the pin E in the slot I will admit, the conical head is far enough from the opening to allow the water, which comes up through the hollow spindle and the openings H, to issue in a solid stream. Moving the spindle toward the opening causes the cone-shaped head to break up the column of water into spray, finer as the shoulders approach their seat, until the flow of water is shut off entirely.

I am well aware that nozzles using an interior spindle moving longitudinally within the body of the device as a means of increasing or decreasing the flow of water have heretofore been used, as see the patent to Clemens, No. 174,781, of March 14th, 1876, and I do not wish to be understood as laying claim, broadly, to the construction embodied therein. The gist of my invention rests in the device employed for giving to the spindle the desired longitudinal motion within the sleeve, readily, easily, and irrespective of the pressure at which the water is forced through the hose.

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

1. The combination, with the rotatable sleeve A, of the spindle having the solid head and hollow body portion provided with openings H, and fitting said sleeve, and a pin fixed to the sleeve passing through slots in

the hollow portion of the spindle and npon which the spindle slides, substantially as described.

2. In combination with the sleeve A, the metal band D, secured to said sleeve by pin E, passing through the slots in the spindle, the spindle within the sleeve, the collar binding sleeve A to sleeve F, and the sleeve F, threaded internally and engaging with the threaded end of the spindle, all arranged as described, and for the purpose set forth.

3. In combination with the threaded spindle, the interiorly-threaded sleeve F, collar C, band D, pin E, and sleeve A, all arranged as described, and for the purpose specified.

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

EDWIN R. TOMLINSON.

Witnesses:
B. F. LYON,
S. F. CULVER.