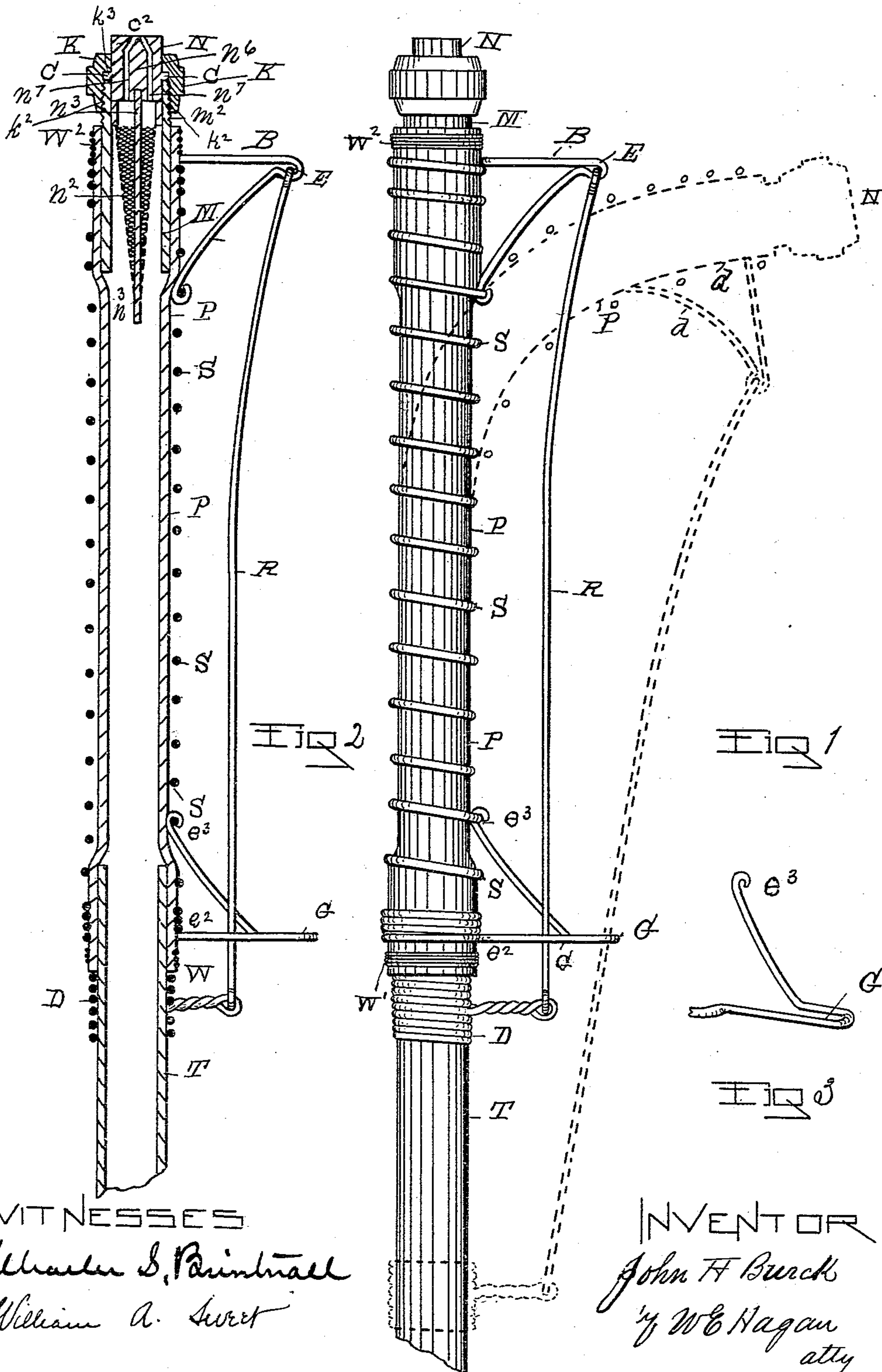


(No Model.)

J. H. BURCK.
FLEXIBLE SPRAYING PIPE.

No. 555,147.

Patented Feb. 25, 1896.



WITNESSES
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JOHN H. BURCK, OF NORTH HOOSICK, NEW YORK.

FLEXIBLE SPRAYING-PIPE.

SPECIFICATION forming part of Letters Patent No. 555,147, dated February 25, 1896.

Application filed May 25, 1895. Serial No. 550,586. (No model.)

To all whom it may concern:

Be it known that I, JOHN H. BURCK, of North Hoosick, Rensselaer county, State of New York, have invented new and useful Improvements in Spraying-Pipes, of which the following is a specification.

My invention relates to the construction of nozzle-pipes which are used for spraying and other like work, and my invention has for its object a construction whereby a flexible discharge-pipe may be bent in a desired direction and secured and held as thus bent so as to spray as adjusted in different directions trees, vines, and shrubery, and the combination with a pipe so constructed of a spraying-nozzle having an interiorly-placed strainer to prevent substances from the water from stopping up the spraying-passage of the nozzle.

Accompanying this specification to form a part of it there is a sheet of drawings containing three figures illustrating my invention, with the same designation of parts by letter reference used in all of them.

Of the illustrations, Figure 1 is a side elevation of a pipe-nozzle containing my invention. Fig. 2 is a central vertical section taken from end to end of the device, and Fig. 3 is a perspective of a part of the latter.

The several parts of the apparatus thus illustrated are designated by letter reference and the function of the parts is described as follows:

The letter P designates the flexible part of the pipe, which is made of rubber and at its lower end is attached to the metal tube T by a wire wrapping W', and at its upper end this flexible pipe is attached to a short metal nipple or pipe M by means of wire wrapping W².

The letter S designates a spiral spring which helically encircles the pipe P to keep the rubber tube from kinking and closing the water-passage therein, between where strapped to the tube T and the nipple M, with said spring secured at its outer end to the wrapping W² and at its inner end to the wrapping W'.

The letter D designates a slide-coil made to encircle the tube T below the wrapping W', and free to be moved up and down on said tube.

The letter G designates a guide-loop which is laterally projected from the wrapping-wire W' at its lower end, e², with its upper end, e³,

connected to the spring S, so as to form between its ends thus attached the guide-loop G.

The letter B designates a bracket-arm which is projected laterally from the spring S at its upper end where the said spring is secured to the pipe P, and this bracket-arm is made with an eye E, and the letter R designates a rod connected to the slide D at its lower end and its upper end is connected to the eye of the bracket-arm. As thus made, when the slide D is drawn downwardly on the tube T it pulls on the bracket B, thus causing the rubber pipe to bend, as shown by the dotted line d of Fig. 2, the rod moving in the guide-loop G, the measure of down-curve given to the pipe P being regulated by the distance at which the slide D is drawn down on the tube T, and as thus drawn down the pipe P is held by the slide D and its engagement with and where encircling the tube T.

The short pipe or nipple M, at its outer end, where projecting beyond the pipe P, is threaded at m² for the reception of a coupler-cap K.

The letter N designates the nozzle proper, which is provided with a collar C and a centrally-arranged spraying-aperture c² in its outer end.

The letter n² designates a cone-form strainer, which is provided at its upper end with a stem n³ and a conical-form head, which latter is arranged within the nozzle interior, so as to leave an annular water-passage n⁷ around said stem-head of the nozzle proper, N, with this annular water-passage connecting with the egress-aperture c², formed in the end of the nozzle proper.

The letter K designates a coupler, which is interiorly threaded at k² and made with an interiorly-arranged shoulder k³.

As thus constructed the parts are connected as follows: The strainer and stem end of the nozzle are passed down in the pipe M, with the collar C resting on the outer end of the pipe M, when the coupler K is screwed onto the pipe T, which puts them in the position shown at Fig. 2.

As thus made and arranged to be adjusted and used a spraying-nozzle pipe is adapted to have the direction of its water-discharge varied and held in any desired direction of curve.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. In a spraying-pipe, the combination with a flexible pipe part having a spraying-nozzle, and provided with an encircling coil-spring, constructed with an offset arm at its upper end, and a projecting guide-loop at its lower end; of a metallic pipe part connected at its upper end to the lower end of the flexible pipe part; a slide having an offset arm; and a rod connecting at its lower end with the slide, thence passing up through the guide-loop of the spring to connect at its upper end with the spring offset arm, substantially in the manner as and for the purposes set forth.

2. The combination with the flexible pipe part P, provided with the encircling spring S, having the offset bracket-arm B, and offset guide-loop G, of the metallic pipe part M, connected at its upper end to the lower end of the flexible pipe part, and provided with the encircling slide D; and the rod R, connected at its lower end to said slide, and from thence passing through the said guide-loop to connect at its upper end with said bracket-arm B, substantially in the manner as and for the purposes set forth.

3. The combination with the flexible pipe

part P, provided with an encircling spring, and arranged to be operated substantially as described, of the nozzle part N, made with the egress-opening c^2 , collar C, conical strainer n^2 , having a stem n^3 , and conical head n^6 ; and the coupler K, threaded onto the pipe M, and provided with a shoulder k^3 ; and the annular water-passage n^7 , connecting with the egress-passage c^2 , substantially as and for the purposes set forth.

4. The combination with the nozzle part N, having the spraying-aperture c^2 , and collar C, of the cone-form strainer n^2 , provided with a stem and conical-form head; the annular water-passage n^7 , encircling said stem-head, between the latter and the nozzle part N, and connecting with said spraying-aperture; and the coupler K, provided with the shoulder k^3 , constructed to connect with the pipe M, substantially in the manner as and for the purposes set forth.

Signed at the city of Troy this 9th day of May, 1894, and in the presence of the two witnesses whose names are hereto written.

JOHN H. BURCK.

Witnesses:

W. E. HAGAN,

CHARLES S. BRINTNALL.