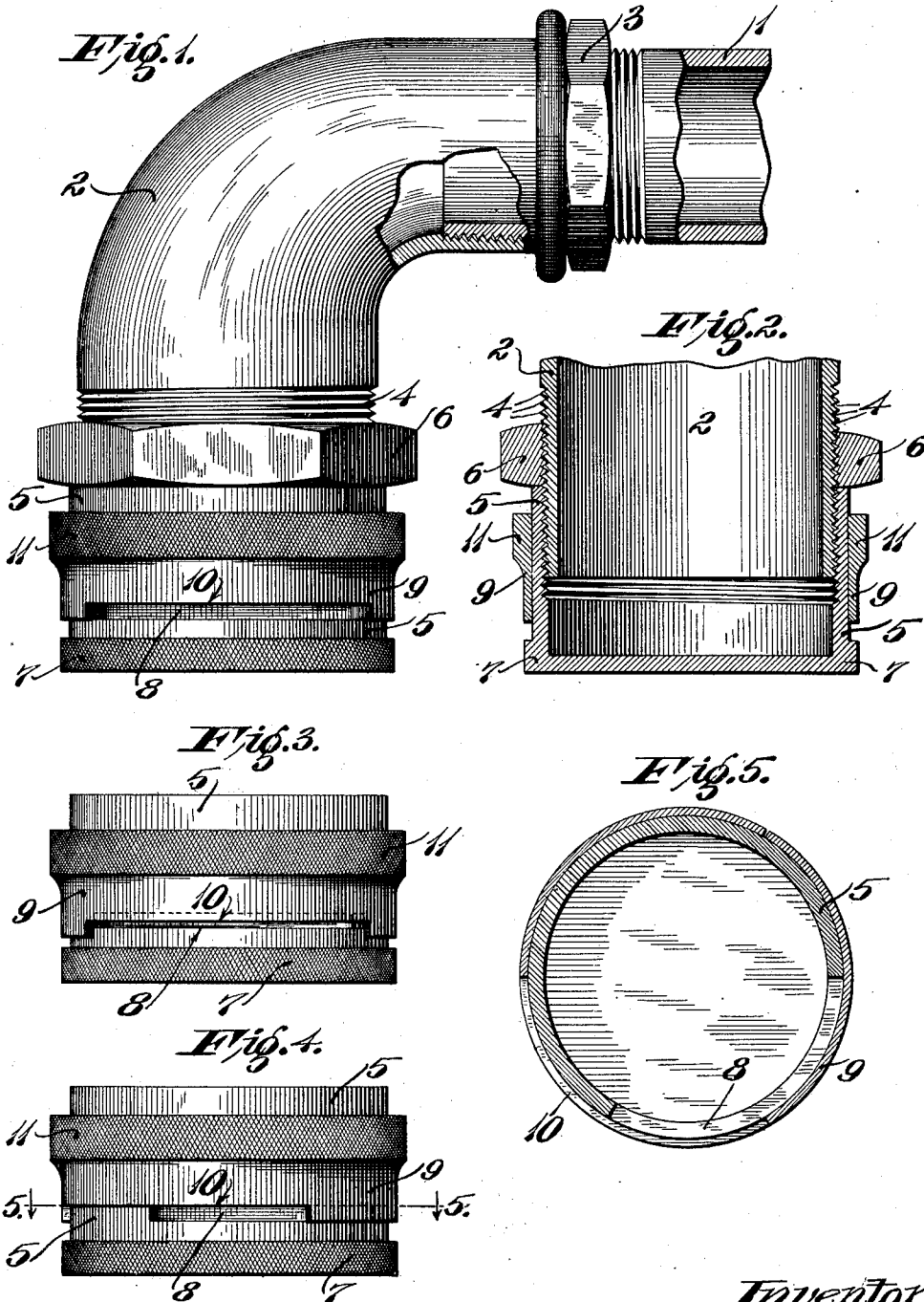


A. W. SHERIDAN.
OIL DISTRIBUTING NOZZLE.
APPLICATION FILED JULY 31, 1911.

1,043,544.

Patented Nov. 5, 1912.



Witnesses:

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By *[Signature]* his attys.

UNITED STATES PATENT OFFICE.

ANDREW W. SHERIDAN, OF ST. LOUIS, MISSOURI, ASSIGNOR OF ONE-HALF TO JAMES C. TRAVILLA, OF ST. LOUIS, MISSOURI.

OIL-DISTRIBUTING NOZZLE.

1,043,544.

Specification of Letters Patent.

Patented Nov. 5, 1912.

Application filed July 31, 1911. Serial No. 641,493.

To all whom it may concern:

Be it known that I, ANDREW W. SHERIDAN, a citizen of the United States, and a resident of the city of St. Louis and State of Missouri, have invented a certain new and useful Improvement in Oil-Distributing Nozzles, of which the following is a specification.

This invention relates to nozzles and more particularly to nozzles for distributing oil upon roadways.

It has for its principal objects to produce a device of simple construction, which can be readily adjusted to deliver the oil in a solid sheet or a spray, as desirable, and also to suit oils of various consistencies; to provide for adjustments so that the oil may be delivered at various angles to the ground; to provide for varying the width of the stream so as to correspond to various areas to be sprinkled; and to attain certain other advantages hereinafter more fully appearing.

The invention consists in the parts and in the arrangements and combinations of parts hereinafter described and claimed.

In the accompanying drawings which form part of this specification and wherein like symbols refer to like parts wherever they occur, Figure 1 is a side elevation, partly in section, showing a delivery nozzle arranged according to my invention; Fig. 2 is a fragmentary vertical section through the portion of the nozzle in proximity to the discharge end; Fig. 3 is a side elevation of the cap-piece detached from the nozzle, showing the adjustable collar-piece adjusted to make the discharge slot narrower; Fig. 4 is a similar view showing the collar-piece adjusted to make the discharge slot shorter, but of substantially the same width as shown in Fig. 1; and Fig. 5 is a horizontal section on the line 5-5 of Fig. 4.

In the drawings, the pipe 1 represents a delivery pipe or head usually disposed horizontally at the rear of a tank-cart or wagon (not shown). The pipe 1 may be a T-head having a nozzle 2 at either end or it may be arranged in any obvious manner, the precise arrangement of the supply piping, except so much thereof as lies adjacent to the nozzle, forming no part of the present invention. In cases where the pipe 1 is horizontally disposed, as shown in the drawing, the nozzle member 2 preferably comprises

an elbow. The elbow is preferably screwed on the pipe 1 and secured by a jam nut 3. The opposite end portion of the elbow is preferably of larger diameter than the end which is secured to the pipe 1, and it is externally screw-threaded, as at 4, to receive an internally screw-threaded cylindrical cap-piece 5. This cap-piece is secured by a jam nut 6 which is threaded on the elbow 2; and in order to manipulate the cap-piece, it is provided with a peripheral shoulder 7 near its bottom and knurled, as shown, or provided with polygonal faces similar to the nuts 3 and 6, as is obvious.

The cap-piece 5 is provided with a slot 8 in its peripheral wall extending parallel with the bottom wall and preferably a slight distance above the latter, as shown. The slot 8 is made of a width and length for any desirable maximum area and its dimensions are varied by adjusting a cooperating collar-piece 9 which is sleeved on the cap-piece and provided with a notch 10 in its margin as shown, or, obviously, a slot of substantially the same dimensions as said slot 8 in the cap-piece 5. Hence, when the slots 8 and 10 are made to register fully, the slot 8 is, of course, open to its full capacity; but, by adjusting the collar both lengthwise and rotatably on the cap-piece 5, the width and length of the opening may be changed. That is, the collar or sleeve 9 may be moved to make the opening relatively narrow without changing the length thereof, as shown in Fig. 3, or it may be rotated so as to shorten the opening without changing its width, as shown in Fig. 4. So, too, it may be rotated as well as moved endwise so as to both shorten and narrow the slot. Thus, the opening may be varied to suit oils of different consistencies and, also, so as to deliver it in a solid sheet or a spray, as desirable. Also for different areas to be covered.

By adjusting the elbow on the pipe 1 and also adjusting the position of the cap-piece 5 on the elbow, the nozzle may be arranged to discharge at various angles with respect to the ground. The pipe 1 may be, as above stated, arranged horizontally with the nozzle hanging vertically, as shown in Fig. 1, so that the slot is positioned to discharge horizontally. While the nozzle member 2 is in this position, the cap-piece 5 may be rotated to various positions thereon. The nozzle

zle member 2 may be turned so as to be horizontal and said cap-piece 5 may be rotated to discharge in a vertical direction and at various angles in said vertical plane. So, too, the nozzle member 2 may be set obliquely and the cap-piece adjusted with respect thereto. It will thus be seen that the device has a universal adjustment for position as well as to the area of the discharge opening. The slot 8 may also be entirely closed by covering it with the collar-piece 9.

The sleeve or collar-piece 9 may be held in place by any suitable securing or clamping means, but it is preferable to make it as a split spring ring which will hold by its own resiliency and permit of its being readily moved upon the cap-piece 5. To facilitate its manipulation, it is preferably provided with a knurled peripheral shoulder 11, as shown, or, obviously, it may be provided with polygonal faces similar to the nuts 3 and 6.

Obviously, the device admits of considerable modification without departing from my invention. Therefore, I do not wish to be limited to the specific construction and arrangement shown.

What I claim is:

1. A delivery nozzle comprising an elbow adjustably mounted so as to be set in a horizontal plane and at various angles to the ground, the free end of said nozzle being closed, said nozzle having a slot in its circular wall extending substantially parallel with its end wall, and a sleeve fitted on said nozzle so as to be moved both rotatably and endwise thereon to cover the slot therein, said sleeve having a slot of substantially the same proportions as and adapted to coöper-

ate with said first mentioned slot to vary the length and width thereof.

2. A delivery nozzle comprising an elbow adjustably mounted so as to be set horizontally and at various angles to the ground, a cylindrical cap-piece secured on the free end of said elbow and having a slot in its circular wall extending substantially parallel with its end wall, and a split spring sleeve rotatably fitted on the circumference of said cap-piece and also movable endwise thereon, said sleeve being arranged and adapted to close said slot in the cap-piece and also vary the width and length thereof.

3. The combination with a delivery pipe, of an elbow rotatably fitted on one end of said delivery pipe, means for locking said elbow on said pipe, a cylindrical cap-piece rotatably fitted on the free end of said elbow having a slot therein, means for locking said cap-piece on the elbow, and means on said cap-piece for varying the width and length of said slot.

4. A delivery nozzle comprising an elbow adjustably mounted so as to be set horizontally and at various angles to the ground, a cylindrical shell rotatably mounted on said elbow and having a slot in its circular wall and a member mounted on the exterior of said shell and capable of rotatory and endwise movement thereon for varying the length or width of the opening or both.

Signed at St. Louis, Missouri, this 27th day of July, 1911.

ANDREW W. SHERIDAN.

Witnesses:

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ALBERT H. CROISSANT.