Dec. 11, 1923. 1,476,810

J. GILSENAN

NOZZLE

Filed Oct. 17, 1921

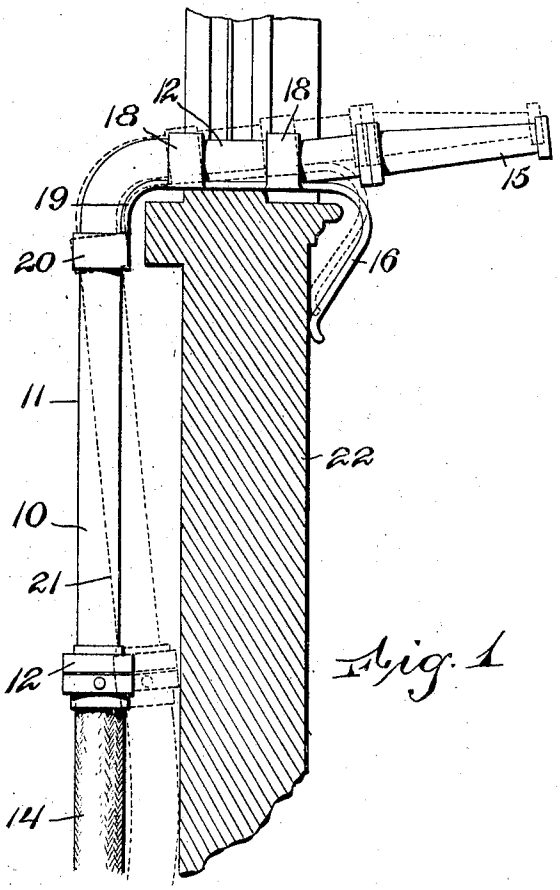


Fig. 1

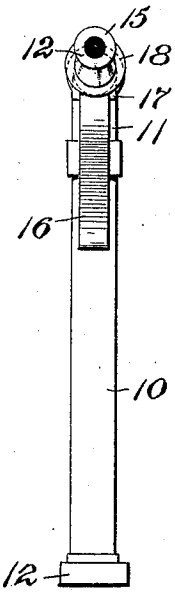


Fig. 2

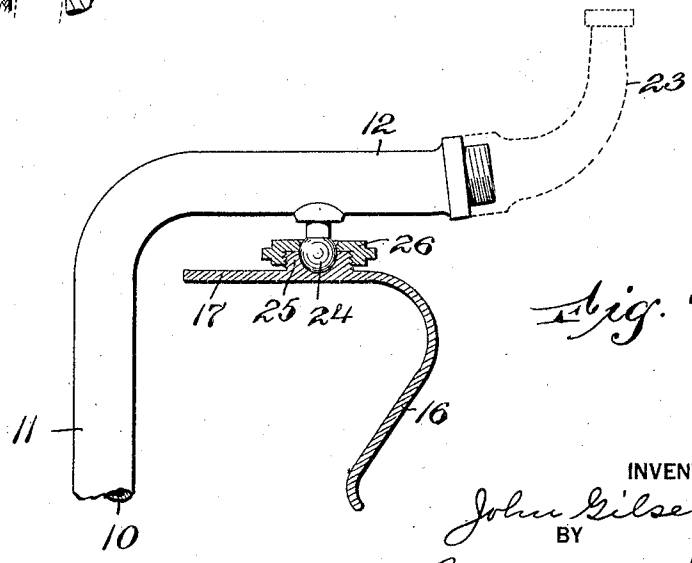


Fig. 3

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UNITED STATES PATENT OFFICE.

JOHN GILSENAN, OF NEW YORK, N. Y.

NOZZLE.

Application filed October 17, 1921. Serial No. 508,283.

To all whom it may concern:

Be it known that I, JOHN GILSENAN, a citizen of the United States, and a resident of New York, county of New York, and State of New York, have invented certain new and useful Improvements in Nozzles, of which the following is a specification.

This invention relates to an improved nozzle which is adapted to be used in locations where it is either impossible for firemen to remain, or where it is only necessary to install a pipe for "wetting down" purposes, and is designed to be caught over a window sill, elevator openings, cellar openings and similar situations, and is securely held in position, such holding being made secure when water under pressure is going through the hose.

The invention is illustrated in the accompanying drawing, in which Figure 1 is a side view of the device, showing part of a wall and a window opening. Figure 2 is a front view of the nozzle shown in Figure 1, and Figure 3 is a side view of the top part of a modified form of construction, a part thereof being shown in section.

The whole device takes on the general form of an L-shaped structure, and I provide a pipe 10 which is bent, being bent substantially at a right angle so that the long arm 11 and the short arm 12 are provided, the long arm 11 having on its bottom a suitable coupling member 12 so that an ordinary hose line 13 can be coupled thereto, the short arm 12 having at its end means for securing it to an outlet pipe or nozzle 15 which can be secured thereto in any of the usual ways, usually by screwing it on, so that different forms and sizes can be placed on the end of the bent pipe.

A hook 16 is provided, this usually being formed by bending the end of a plate 17, the plate 17 being secured to the short arm 12 in any suitable way, usually by means of collars 18 or the like, and I prefer also to bend the end of the plate, as at 19, to form a support for the elbow of the pipe 10, and I place a collar 20 or its equivalent at the extremity of the plate to grasp and hold the pipe 10.

In many fire situations, very often on fire escapes and also on straight walls where ladders have been raised, firemen can not remain on account of dense smoke or flames bursting from windows, and it is necessary to direct water through such window openings and on to the fire. In such cases the pipe 10 is taken up to the place where it is to be installed, for instance, over a window sill into a window opening, and the length of the pipe 10 is sufficient so that a fireman at a considerable distance below the window can hook the upper end of the device over the sill to the position shown in full lines in Figure 1. The hose 13, if not previously attached, can now be secured in place and then the water is turned on.

When pressure is applied, by reason of the water passing through the pipe, very often a high pressure, the device is more securely locked in position and steadied, since the lower end of the long arm 11 of the pipe kicks in, as at 21, and bears against the outer side of the wall, and the back pressure on the short arm 12 causes the hook 16 to be more tightly pushed against the inner face of the wall 22 below the window opening.

If desired, the direction of the stream can be slightly altered by grasping the lower end of the long arm of the pipe, or by means of the hose 13, and the pipe can be swung to a limited extent laterally and to a considerable extent from the outer face of the wall so as to direct the stream of water from the outlet pipe in different directions within the building.

This description of the use of the pipe in a window opening is simply for the purpose of making clear how it operates, and it will be understood that the device can be used with the long arm of the pipe horizontal, such as through a side wall, vault-like, or through openings cut in floors leading into cellars, and by means of a suitable nozzle, such as the so-called goose neck nozzle 23, shown in Figure 3, a horizontal stream can be delivered from this horizontal situation of the long arm 11 of the pipe.

If a more flexible use of the pipe, and consequently the nozzle, is desired, I may provide the plate 17 and the short arm 12 of the pipe with coacting means for securing such flexibility, and in the drawing I show a ball 24 seated in the socket 25, and a suitable regulating nut 26 can be used to enclose the ball and either lock it in position or loosen it sufficiently to permit its being rocked, and in this way the hook 16 is not disturbed from its position when it is caught over the

edge of an opening, but the pipe 12 can be swung in different directions by reason of the above described ball joint.

The pipe is adapted for use in dangerous situations, for instance, in grain elevators, where caveins would free tons of grain and crush people working in the building, and such pipe can be installed in an opening in such grain elevators, and by means of a goose neck nozzle 23, as shown in Figure 3, the stream can be directed vertically into such elevators or the shafts thereof, as will be evident.

I claim:

1. A nozzle comprising a portable rigid substantially right-angled pipe, and a hook on the inner side of one of its arms.

2. A nozzle comprising a portable rigid substantially right-angled pipe, a hook on the inner side of one of its arms, and an outlet pipe, said outlet pipe and the end of the arm which has the hook thereon having coacting means for securing the outlet pipe to said arm.

3. A nozzle comprising a portable rigid pipe bent to form a short arm and a long arm substantially at right angles to each other and a hook on the end of the short arm and at its inner side.

4. A nozzle comprising a portable rigid pipe bent to form a short arm and a long arm, a plate bent at one end to form a hook and having means for securing it to the pipe so that the hook extends inward from the free end of the inner side of the short arm, said short arm having an outlet on said end, said long arm extending below the hook.

5. A nozzle comprising a rigid pipe bent to form a short arm and a long arm substantially at right angles to each other, a plate bent at one end to form a hook, the short arm of the pipe and the plate of the hook having connections providing for adjustment between these elements.

6. A nozzle comprising a rigid pipe bent to form a short arm and a long arm, a plate bent at one end to form a hook, the short arm of the pipe and the plate having elements thereon which, when assembled, form a ball joint whereby adjustment of the pipe relative to the plate is provided.

7. A portable nozzle comprising a rigid right-angled pipe, one arm of which is provided on its inner side with a hook extending toward the other arm and above the end of said other arm, whereby the other arm and the hook can engage an element between them.

In testimony that I claim the foregoing, I have hereto set my hand, this 15th day of October, 1921.

JOHN GILSENAN.