Feb. 18, 1930. J. J. GILSENAN 1,747,624

NOZZLE

Filed Aug. 24, 1928

Fig. 1

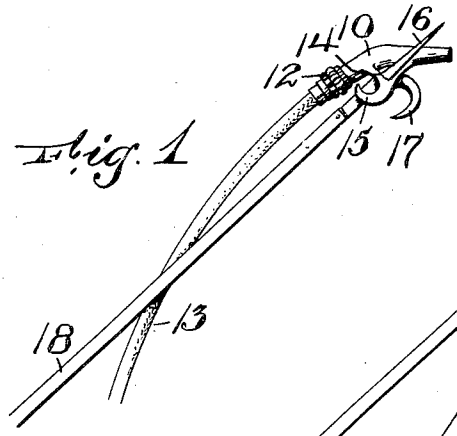


Fig. 2

Fig. 3

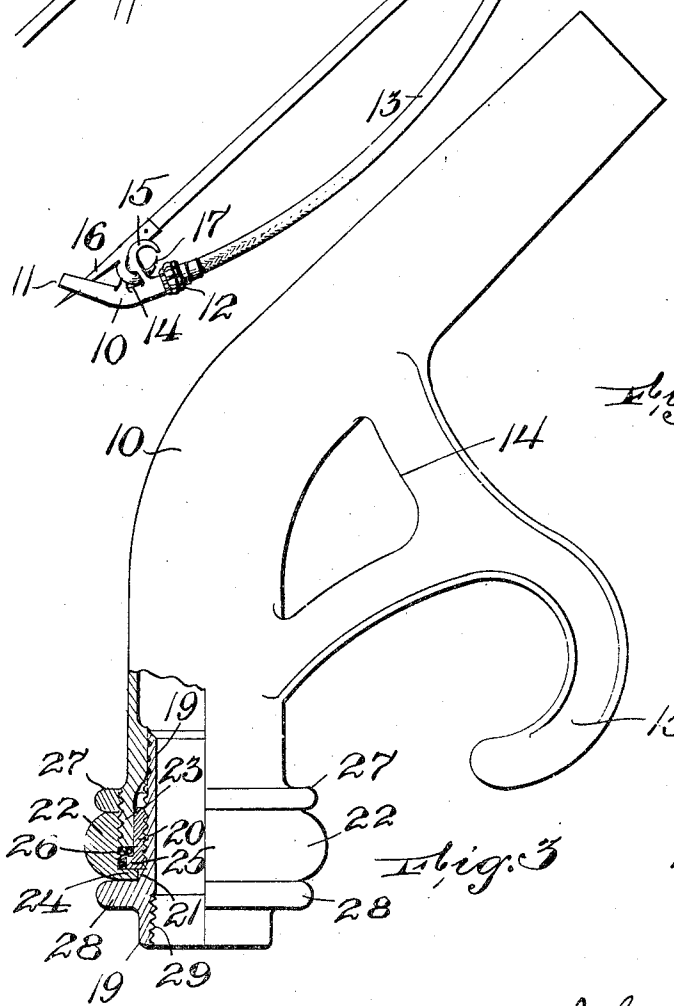
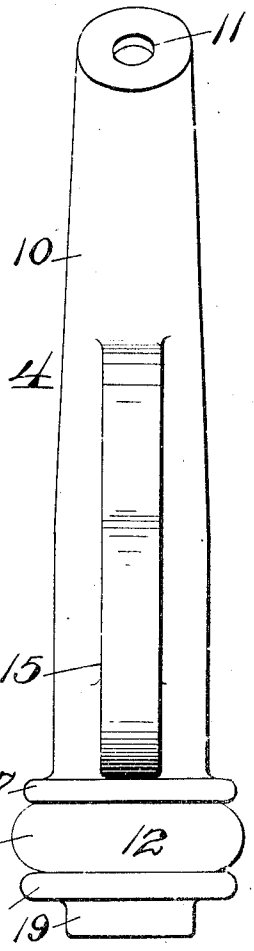


Fig. 4



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UNITED STATES PATENT OFFICE

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NOZZLE

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This invention relates to an improved nozzle which is particularly adapted for fire purposes and enables the person who operates the nozzle to direct a stream to points not easily reached by an ordinary nozzle and to points where a close approach to the fire is not possible.

The invention is a curved nozzle with means for its temporary attachment to a fire hook or similar support and having a swivel connection with the hose to enable an easy swinging of the nozzle without twisting the hose which is heavy as it is filled with fluid.

The invention therefore comprises a curved nozzle with a loop on its inner curved side, the loop usually being a closed loop with an open loop or hook in extension thereof to enable the nozzle to be placed in various positions on the support.

The invention is illustrated in the accompanying drawing in which Figure 1 is a view showing an improved nozzle supported in an elevated position and Figure 2 is a similar view showing the nozzle supported in a lowered position. Figure 3 is a side view of a nozzle embodying my invention with one-half the swivel connection shown in section. Figure 4 is an end view of the nozzle shown in Figure 3.

The nozzle is provided with a curved main portion 10 having the outlet 11 and with a connection 12 for attaching it to a hose 13. On the inner side of the nozzle is a loop usually a closed loop 14 and this may be extended to an open loop or hook 15. These extend substantially in the same plane and are preferably cast in one piece with the nozzle.

With this form of nozzle the stream can be directed to what is generally an inaccessible place or at any rate one reached with difficulty.

In case the stream is to be directed to a point higher than the hoseman the nozzle can be placed as in Figure 1 with the fire hook supporting the nozzle. The usual fire hook has a straight end 16 and a hook 17, and the end 16 is placed through the eye or loop 14 and the shank of the hook or its handle 18 or the hook 17 bear on the nozzle and steady it. By turning the handle 18 the nozzle can be turned in any direction and easily when the connection 12 is a swivel connection. The application of foamy mixtures to fires, as oil tank fires, must be made directly to the burning mass, especially since any breeze or any draft will dissipate the flaky and foamy substance and much of it is wasted and does no good. With this device mounted on a fire hook the nozzle can be placed on the edge of a tank and the foamy extinguisher directly applied. In the same manner the ordinary stream can be directed around corners and beyond doorways, up and down and to the right and left. In fact the movement can be in all directions and the stream applied directly to a fire that would be practically inaccessible with an ordinary straight nozzle.

In case of a cellar fire or a fire on the under side of an automobile, in fact, in any situation where the stream must be directed upwardly from a point below the hoseman, the nozzle can be secured to a hook or other device as in Figure 2, by catching the fire hook 17 through the loop 14 and then by manipulation of the hose and the hook any vertical and lateral adjustment of the stream can be made.

The nozzle is attached to the hose by a swivel joint and I show a joint that will not separate or blow off under high pressure. The nozzle joint comprises a thimble 19 to the outside of which is screwed a ring 20 which is limited by the shoulder 21. The ring 22 is screwed to the butt 23 of the nozzle and has a flange 24 that is confined by the flange 25 of the ring 20. The flange 24 can rotate underneath the flange 25 of the ring 20. The packing 26 is placed between the rings and the end of the butt 23 and makes the joint water-tight. The lock nut 27 holds the ring 22 in place.

The thimble 19 has the flange 28 by which it can be turned and the screw-threads 29 provide means for attaching the hose 13.

Various modifications can be made in the device without departing from the scope of the invention.

I claim:—

1. A curved nozzle having a rigid means on the inner side of the curved part for engagement by a fire hook and having a swivel

connection for attaching the nozzle to a hose.

2. A nozzle having on one side a closed loop for engagement with a support and a rearwardly extending hook in extension of the closed loop.

3. A curved nozzle having a longitudinally disposed loop on its inner curved side, and a swivel connection for attaching the nozzle to a hose.

4. A curved nozzle having a loop on its inner curved side and a hook on the outer side of the loop, and a swivel connection for attaching the nozzle to a hose.

5. A curved nozzle having a loop on its inner curved side, a flanged thimble entering the nozzle from the end, a ring screwed to the outside of the thimble, a second ring screwed to outside of the nozzle, the rings having overlapping flanges to secure the parts against separation and a packing between the end of the nozzle and the flange of the first ring.

In testimony whereof I affix my signature.

JOHN J. GILSENAN.