

(No Model.)

C. T. HOLLOWAY.

CUT-OFF NOZZLE.

No.296,172.

Patented Apr. 1, 1884.

Fig. 1.

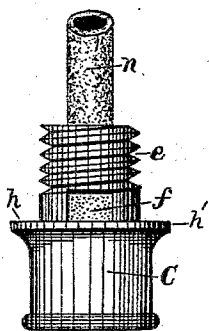
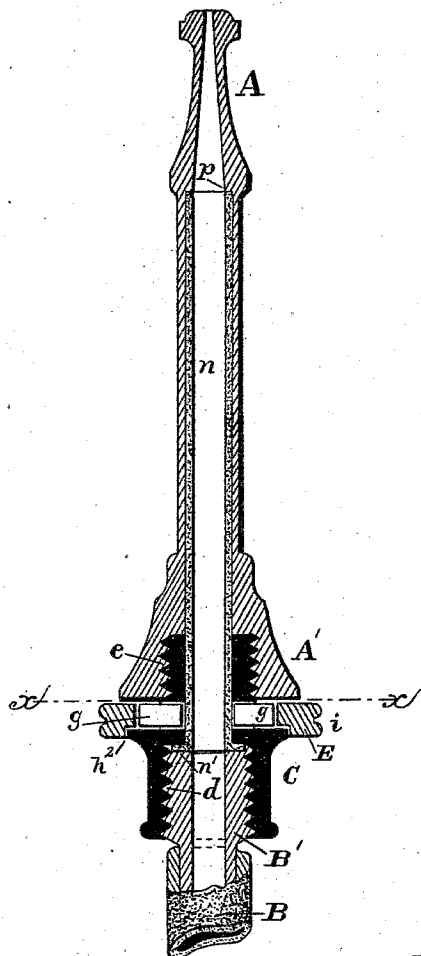


Fig. 3.

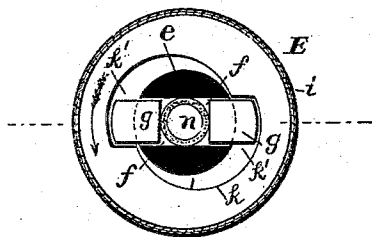


Fig. 2.

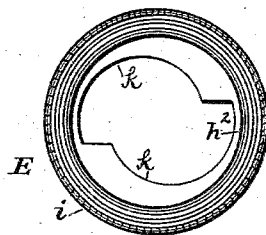


Fig. 4.

Witnesses:
A. C. Eader
Jno. E. Morris.

Inventor:
Chas. J. Holloway
By Chas. B. Mann
Attorney

UNITED STATES PATENT OFFICE.

CHARLES T. HOLLOWAY, OF BALTIMORE, MARYLAND.

CUT-OFF NOZZLE.

SPECIFICATION forming part of Letters Patent No. 296,172, dated April 1, 1884.

Application filed September 8, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES T. HOLLOWAY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Cut-Off Nozzles, of which the following is a specification.

The object of my invention is to provide a cut-off nozzle adapted to prevent the liquid which passes through it from gaining access to the working parts or screw which connects the nozzle to the hose or other source of supply, and which shall also be adapted or provided with means to control the discharge of the liquid. My improved nozzle is particularly desirable for use with chemical fire-extinguishers.

The invention will first be described, and then designated in the claim.

In the annexed drawings, which illustrate the invention, Figure 1 is a longitudinal section. Fig. 2 is a cross-section on the line $x x$, Fig. 1. Fig. 3 is a side view of the intermediate coupling. Fig. 4 is a view of the loose collar, showing the recess therein and the eccentric rims.

The letter A designates the discharge end of the nozzle; A', the screw end, by which the nozzle is attached; B, ordinary hose, and B' the screw collar or coupling which the ends of hose are usually provided with.

Instead of attaching the screw end A' of the nozzle directly to the coupling B' of the hose, I provide an intermediate coupling, C, which has a female screw, d , for attachment to the hose-coupling, and a male screw, e , for attachment to the nozzle. Just below the male screw e are two holes, f , in the neck. These holes are diametrically opposite each other. A flat flange, h , projects laterally on a plane with the lower edge of the holes, and its rim h' is circular. A metal block, g , is fitted in and is adapted to slide in and out of each hole, and when out is in contact with the flat flange. A loose collar, E, has its rim i knurled to facilitate its being turned or rotated, and has on one side a recess with a circular wall, h'' , concentric with the knurled rim. The flat circular flange h occupies the recess. When the collar is rotated, the wall h'' of the recess will turn loosely around the rim h' of the flange.

The central part of the collar is entirely cut out to set down around the male-screw neck. The cut-out part leaves two half-circular eccentric rims, k . When the collar is in position, each of these eccentric rims comes on the outer side of one of the blocks g . It will be seen that when the blocks project out of their holes f the projecting part must occupy the wide part k' of the space formed by the half-circular eccentrics. Now, when the collar is partly rotated, the eccentric rims gradually press both blocks into their holes and toward each other. The holes e , having the blocks g fitted into them, and the collar having two half-circular eccentric rims to compress the blocks together, constitute the metal parts of the means to control the discharge of liquid. A rubber tube, n , has one end flared to form a washer, n' , which fits between the end of the screw-coupling B' on the hose and the seat of the female screw d on the intermediate coupling. The rubber-tube lining, with the washer formed at its end, is applicable whether the intermediate coupling be used or not. It will thus be seen the liquid passing through the hose enters the flared end of the rubber tube. This rubber tube continues through the intermediate coupling and through the nozzle to near the discharge end. The end of the flexible tube rests against a shoulder, p , formed inside of the nozzle. By this arrangement the flexible tube constitutes a lining for the nozzle, and the liquid passes through the flexible tube, being thereby prevented from gaining access to the screw which couples the nozzle. The screw-coupling is thus protected from the action of the chemicals used in fire-extinguishers. When the two blocks g are compressed toward each other, they press the walls of the flexible tube together, and thereby completely stop the passage of the liquid. The metal parts, which control the discharge of the liquid, not being accessible to, are therefore not injuriously affected by, the chemical liquid.

I regard the so-called "intermediate coupling," C, as a part of the nozzle.

I do not claim, broadly, a nozzle having sliding blocks and a rubber-tube lining, but claim the construction as hereinafter stated.

Having described my invention, I claim

and desire to secure by Letters Patent of the United States—

5 A liquid-discharging nozzle having a flexible tube-lining extending through it, a laterally-projecting flat flange, *h*, with a circular rim, *h'*, a neck, *e*, above the flange, provided with two holes, *f*, a block, *g*, to slide in and out each hole, and a loose collar, *E*, provided with a recess on the side, having a circular wall, *h*², and with its center entirely cut

out, forming two internal eccentric rims, *k*, which bear on the outside of the said blocks, as shown and described.

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

CHARLES T. HOLLOWAY.

Witnesses:

JNO. E. MORRIS,
JNO. T. MADDOX.