

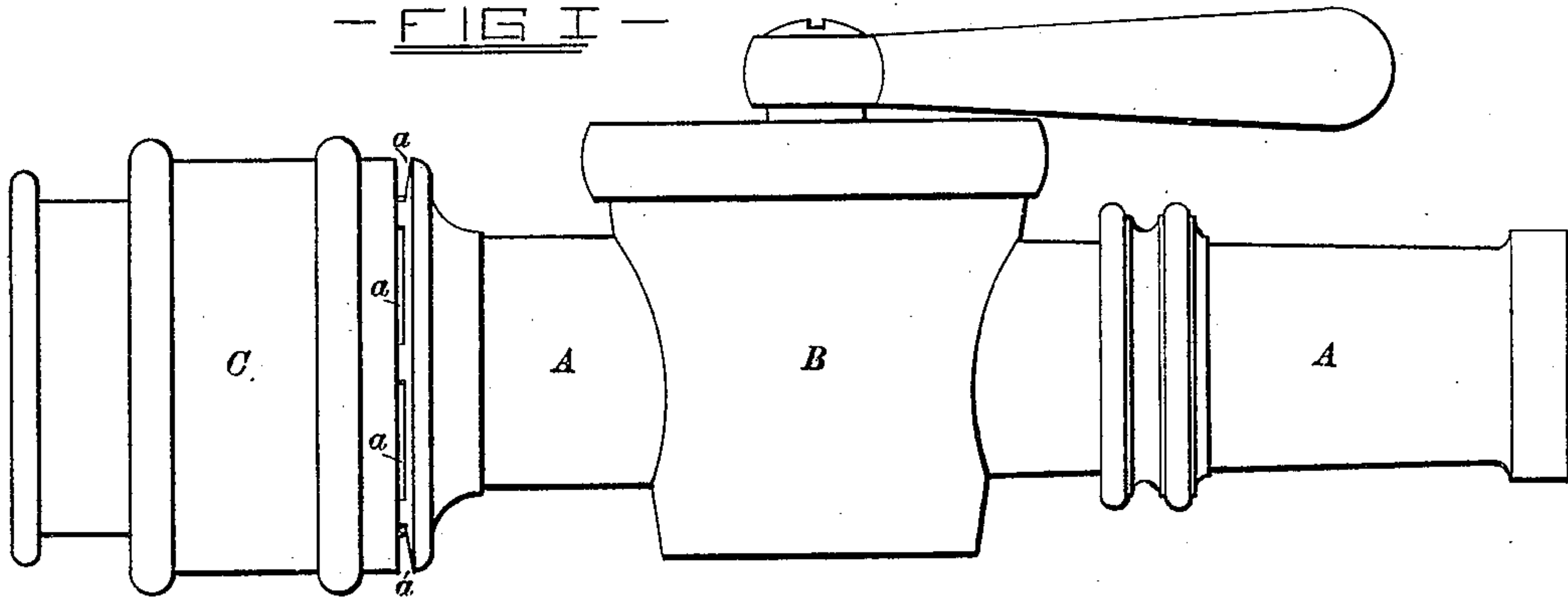
(Model.)

J. E. PRUNTY.
HOSE PIPE NOZZLE.

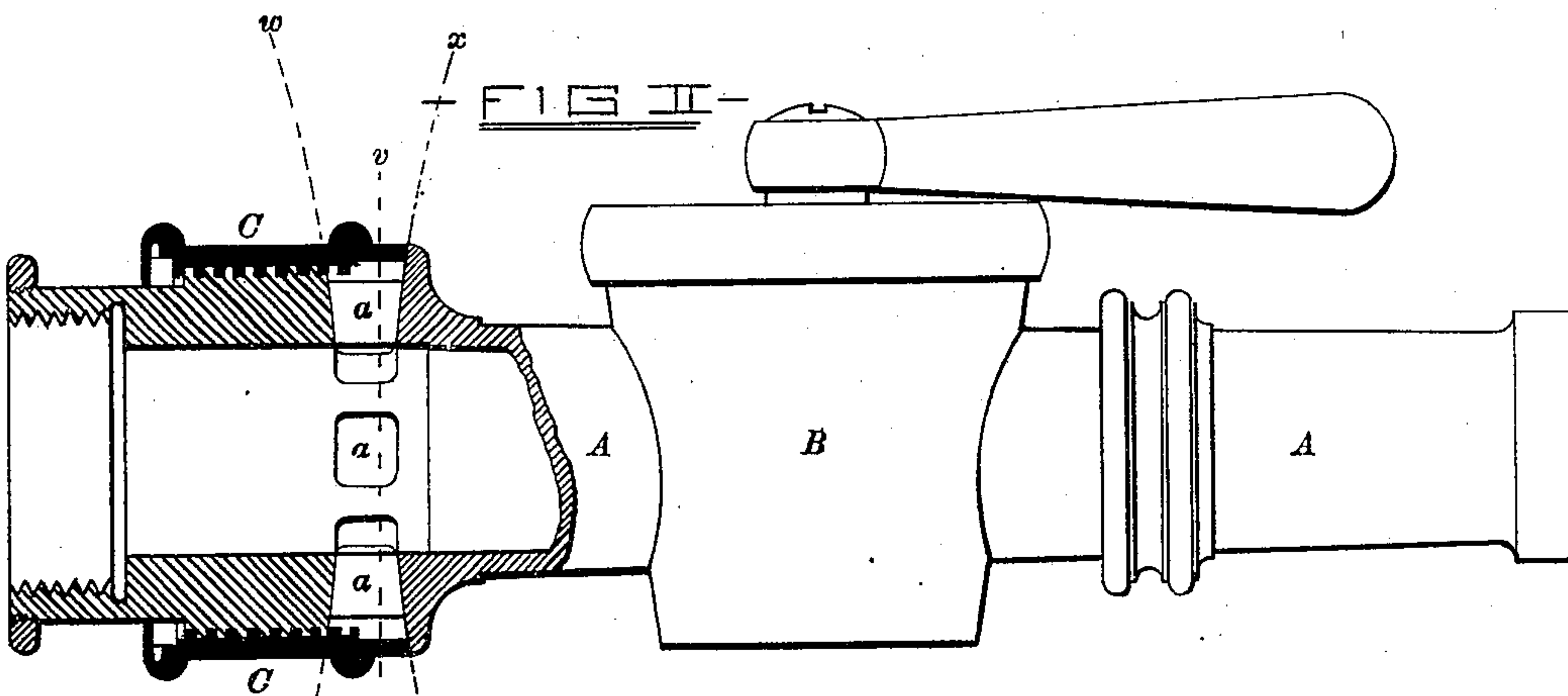
No. 245,559.

Patented Aug. 9, 1881.

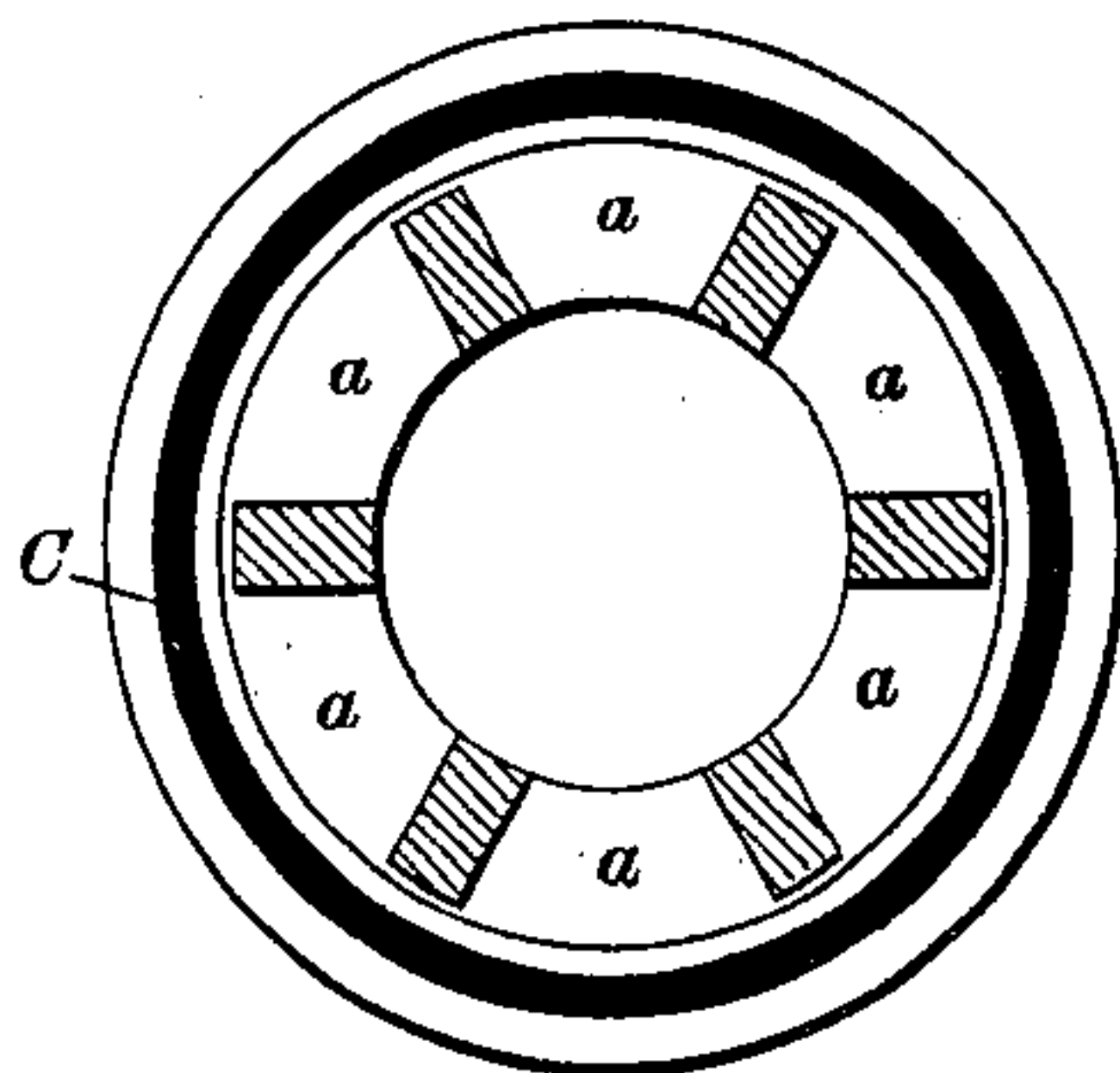
— FIG I —



— FIG II —



— FIG III —



— WITNESSES —

W. Langley
Harry V. Albough

— INVENTOR —

John E. Prunty
by E. H. Howard
attys.

UNITED STATES PATENT OFFICE.

JOHN E. PRUNTY, OF WAVERLY, MARYLAND.

HOSE-PIPE NOZZLE.

SPECIFICATION forming part of Letters Patent No. 245,559, dated August 9, 1881.

Application filed April 12, 1881. (Model.)

To all whom it may concern:

Be it known that I, JOHN E. PRUNTY, of Waverly, in the county of Baltimore and State of Maryland, have invented certain Improve-
5 ments in Hose-Pipe Nozzles, of which the following is a specification.

This invention relates to the novel construction of a hose-pipe nozzle, whereby, at the pleasure of the fireman handling the same, a stream
10 of water may be made to pass laterally and radially from the nozzle, and form a disk or sheet of water to protect the fireman from severe heat and smoke in the extinguishment of fires. The water ejected from the nozzle in
15 the form of a sheet or disk, as described, may, however, be increased in volume and employed in extinguishing fires in the holds of vessels and other similar places. In this latter use of my invention the hose-nozzle is passed through
20 the hatch or through a hole cut in the deck of the vessel and held in an inverted position, so that the water ejected laterally from the pipe is thrown against the under side of the deck and distributed over a large portion of the interior of the hold. The lateral stream can also
25 be employed in extinguishing fires in warehouses and buildings generally, where communication with the fire can only be had safely through a hole cut in the floor of the room
30 above the fire, or through a window or skylight, and in many other cases where entrance to the burning building is impossible or dangerous on account of the dense character of the smoke and the close packing of the materials on fire.

35 The said invention consists in providing a hose-pipe nozzle having a shut-off cock or valve therein with a series of lateral apertures and an exterior screw-sleeve adapted to be turned and thereby moved longitudinally of the hose-
40 pipe nozzle to regulate the thickness of the sheet or disk of water projected from the nozzle, or to entirely close the opening and prevent the lateral escape of water, as may be desired.

45 It further consists in a peculiar construction of the nozzle and the adjusting-sleeve, whereby the water ejected laterally from the nozzle is in the form of a sheet or disk instead of a series of independent streams, as will herein-
50 after fully appear.

In the further description of my said invention which follows reference is made to the accompanying drawings, forming a part hereof, and in which—

Figure I is an exterior view of the improved
55 hose-pipe nozzle with the lateral apertures partly open. Fig. II is a longitudinal section of the invention with the lateral apertures closed. Fig. III is a cross-section of the nozzle taken on the dotted line *v v*.
60

Similar letters of reference indicate similar parts in all the views.

In the said drawings, A is the hose-pipe nozzle, having the usual shut-off cock or valve B. The lateral apertures in the hose-pipe nozzle
65 are represented by *a*, and it will be seen that they are flared outwardly to give to the disk of water ejected through them when fully opened or uncovered two concave faces, as indicated by the dotted lines *w w* and *x x*.
70

C is a screw-sleeve placed exteriorly of the nozzle and adapted to be moved by hand longitudinally thereof to open and close the apertures *a*.

It will be seen by reference to the drawings
75 that the lateral apertures *a* do not extend, as such, to the circumference of the nozzle, but merely connect the interior of the pipe with an annular groove or space formed by the outer face of the sleeve C and the inner face of a
80 projection on the nozzle A. By this means the separate streams of water leaving the interior of the pipe are united to form a continuous sheet before being discharged.

Supposing the cock B to be open and the
85 aperture *a* uncovered or opened to a limited extent, a thin sheet or disk of water is interposed between the fireman holding the hose-pipe and the fire, which effectually protects him from excessive heat and dense smoke,
90 while it does not obstruct his view of objects in front of him or interfere with the effectiveness of the main stream of water delivered from the nozzle.

To use the lateral stream of water for the
95 purpose of extinguishing fire under circumstances and in the manner before described, the shut-off cock is closed and the lateral apertures *a* opened to their full extent. The entire
100 discharge of water is now through the lateral

apertures *a*, and it takes the form indicated by the dotted lines *ww* and *xx* before referred to.

I claim as my invention—

1. A hose-pipe nozzle having a shut-off valve
5 or cock therein, a lateral discharge-aperture situated in the rear of said valve or cock, and means for controlling or suspending the lateral discharge independently of the said valve or
10 cock, substantially as and for the purpose specified.

2. A hose-pipe nozzle having an exterior circumferential groove or lateral discharge-opening adjustable in width, in communication
15 with the interior of the nozzle by means of a series of apertures, substantially as and for the purpose specified.

3. A hose-pipe nozzle having a circumferential discharge-aperture controllable in width by means of a screw or threaded outer sleeve, substantially as and for the purpose specified. 20

4. A hose-pipe nozzle having a lateral or circumferential discharge-aperture adjustable in width, and curved faces to guide or direct the current of water discharged through the said aperture, substantially as and for the purpose 25 specified.

JOHN E. PRUNTY.

Witnesses:

WM. T. HOWARD,
HARRY V. ALBAUGH.