(No Model.)

C. CALLAHAN.

DISCHARGE PIPE FOR HOSE.

No. 265,573. Patented Oct. 10, 1882.

Fig. 1.

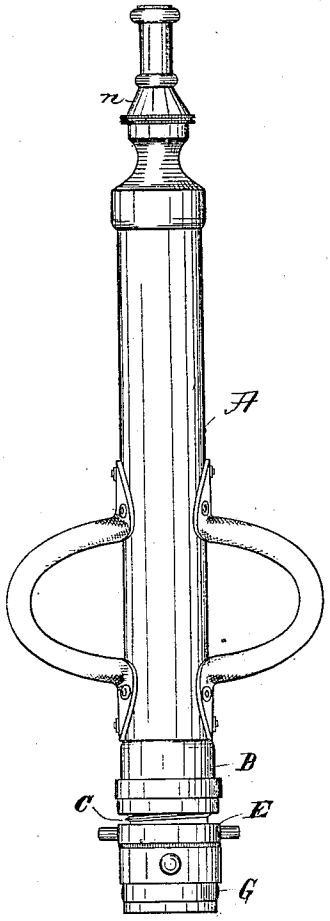


Fig. 2.

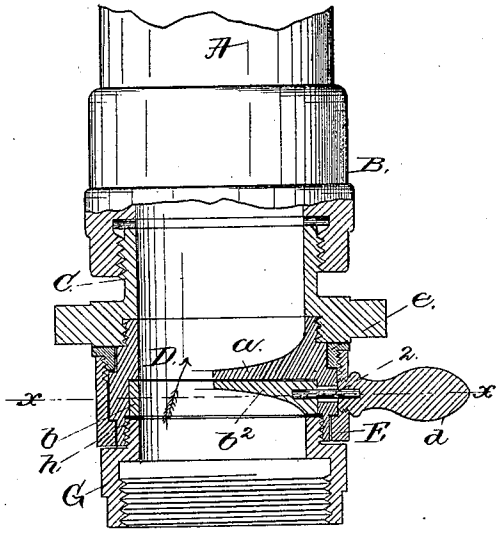
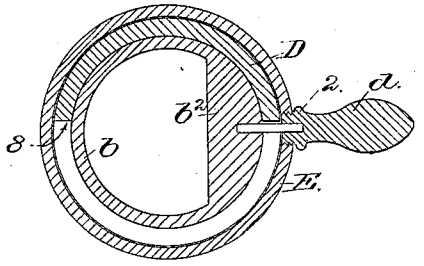


Fig. 3.



Witnesses.
Fred A. Powell.
John F. C. Reinhart

Inventor:
Cornelius Callahan
by Crosby & Gregory
Attys.

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UNITED STATES PATENT OFFICE.

CORNELIUS CALLAHAN, OF CHELSEA, MASS., ASSIGNOR TO THE AMERICAN FIRE HOSE MANUFACTURING COMPANY, OF SAME PLACE.

DISCHARGE-PIPE FOR HOSE.

SPECIFICATION forming part of Letters Patent No. 265,573, dated October 10, 1882.

Application filed May 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, CORNELIUS CALLAHAN, of Chelsea, county of Suffolk, State of Massachusetts, have invented an Improvement in Discharge-Pipes for Hose, of which the following description, in connection with the accompanying drawings, is a specification.

This invention is an improvement on United States Patent No. 219,505, to which reference may be had. That patent shows a valve to control or it may be cut off the discharge of water from the pipe; but as constructed the force of the water acts to crowd the valve away from its seat, and the greater the pressure the greater the tendency of the valve to leak. In this my invention I have so made the valve that the pressure of the water is made effective to aid in forcing the valve to its seat, and by so doing I have been enabled to form a valve which will not leak.

Figure 1 represents in side elevation a discharge-pipe for fire-department use provided with my improvement. Fig. 2 is an enlarged sectional detail thereof; and Fig. 3 is a section on the line *x x*, Fig. 2.

The pipe A, which is and may be of any usual construction, has at its lower end an internally-threaded metal ring, B, which, as herein shown, receives the externally and internally threaded ring C. Inside this ring C is screwed the ring D, which constitutes the valve-seat, a portion of which is extended into the center of the ring, as shown at *a*. The valve is shown as a ring, *b*, having a portion, b^2, extended toward the center of the said ring. The side of the ring D constituting the valve-seat is slotted, as shown in Fig. 2, to receive the pin 2 of the handle *d*. The handle *d* is connected with an annulus, E, screw-threaded internally at its upper end, where it engages a threaded collar, *e*, resting on a shoulder of the ring D, thus keeping the annulus E on the said ring.

The ring or coupling-section G, of usual construction, is that which will be connected with the length of hose, (not shown,) and through which water will be supplied to the discharge-pipe. A packing is introduced at *h* between the ring *b* and the end of section G.

When the valve is in the position shown in Figs. 2 and 3 water is free to pass through the valve and valve-seat, as designated by the arrows; but by carrying the handle *d* to the opposite side of the ring D, so that the pin 2 meets the shoulder 8 (see Fig. 3) at the other end of the slot in the ring D, the portion b^2 of the valve will be moved from beneath the portion *a* of the valve-seat, and will be placed in position to completely close the passage through the valve. Any intermediate position of the valve will more or less arrest the quantity of water to be discharged. The force of the water against the under side of the valve portion b^2 acts to crowd the valve against its seat, the pressure of the valve against its seat being in accordance with the pressure of the water. I have arranged the valve near the receiving end of the discharge-pipe, for by such arrangement I am enabled to gain very important advantages, chief of which is that the water, the current of which is broken up as it passes the valve, is furnished a space and allowed time in which to again collect in a solid moving mass as it arrives at the nozzle *n*, whereas if the valve were near the nozzle the water could not be discharged with a full, steady stream, but would spray and break.

I claim—

1. A hose-nozzle having the threaded ring C and hose-coupling section G, with the annular valve-seat D *a* between them, combined with the valve-ring *b* b^2 seated by the pressure of water thereupon, substantially as shown and described.

2. The valve-ring *b*, having the portion b^2 and an operating-handle, combined with the superposed and surrounding annulus D *a*, in which the valve-ring and portion b^2 are seated by the pressure of water, the ring C, coupling G, and ring E, substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CORNELIUS CALLAHAN.

Witnesses:

G. W. GREGORY,

B. J. NOYES.