

M. BURNETT.
Hydrants.

No. 158,622.

Patented Jan. 12, 1875.

Fig. 1.

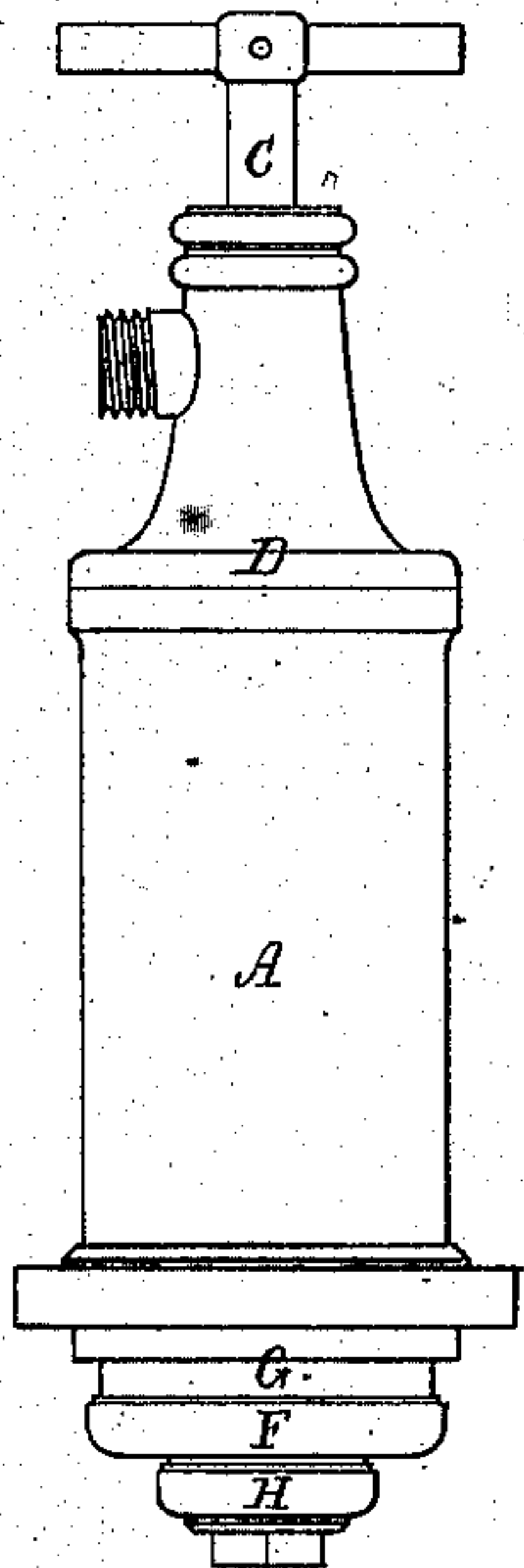


Fig. 2.

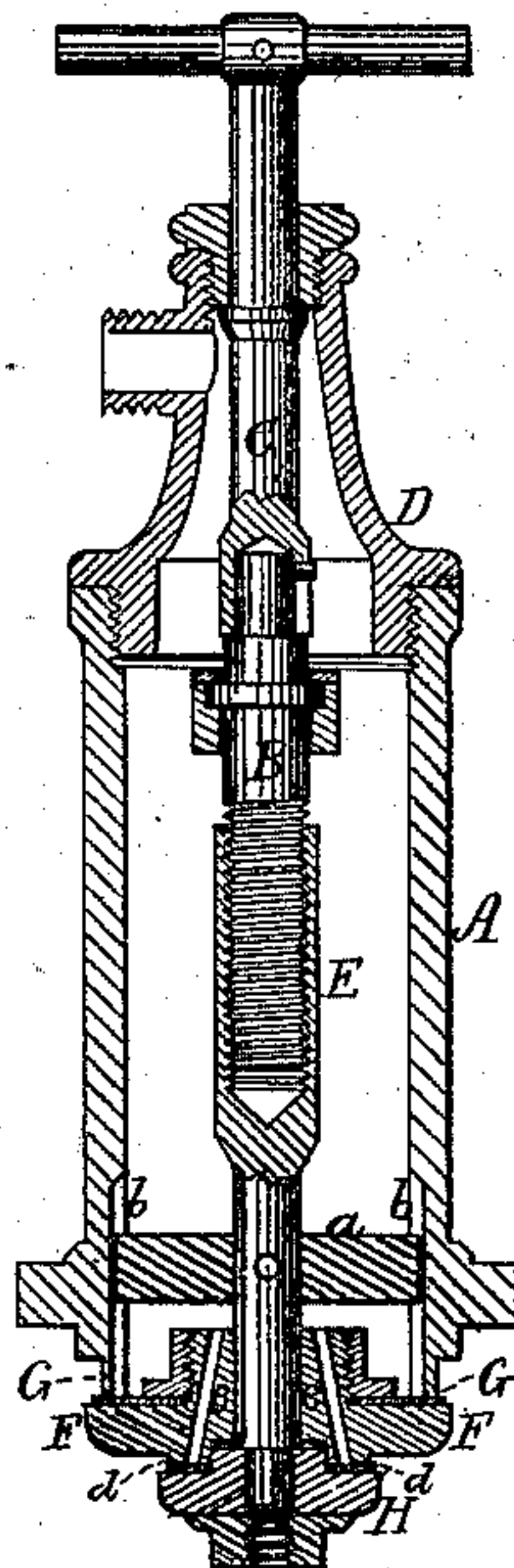
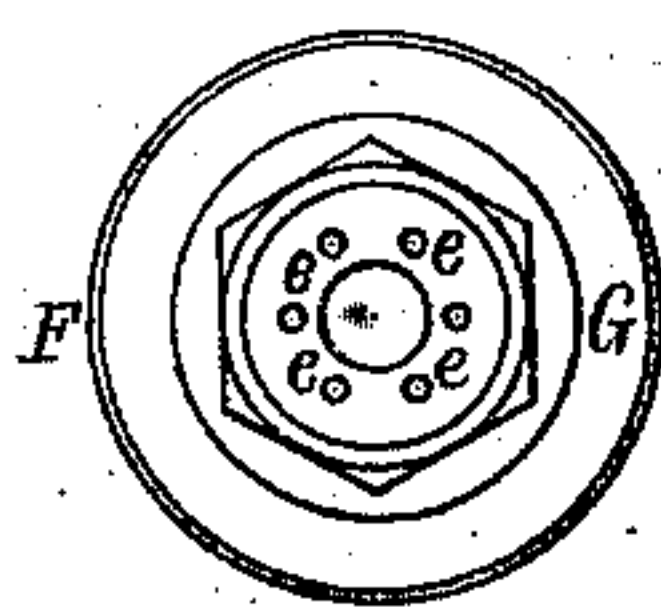


Fig. 3.



Witnesses.

S. W. Piper
L. N. Miller

Marshall Burnett

by his attorney.
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UNITED STATES PATENT OFFICE.

MARSHALL BURNETT, OF HYDE PARK, MASSACHUSETTS.

IMPROVEMENT IN HYDRANTS.

Specification forming part of Letters Patent No. **158,622**, dated January 12, 1875; application filed December 9, 1874.

To all whom it may concern:

Be it known that I, MARSHALL BURNETT, of Hyde Park, in the county of Norfolk and State of Massachusetts, have invented a new and useful Improvement in Hydrants; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, and Fig. 2 a vertical and transverse section, of a hydrant having my improvement.

In carrying out my invention I provide the valve of a hydrant with an auxiliary or smaller valve, and a seat therefor, the said auxiliary valve to be fastened to the valve-stem; and I also make the main valve with one or more passages extending through it from the seat of the auxiliary valve, and I apply the main valve to the stem of both valves, so as to be capable of sliding thereon a short distance from the auxiliary valve up to a shoulder on the stem, or to the cross-head or guide of such stem, the object of such being to relieve the main valve of pressure of water to an important extent, tending to prevent it from being readily opened.

It is well known that, owing to the great head of water against the valve of a street-hydrant, it often becomes a difficult matter to force the valve open or away from its seat.

With my invention the valve can be easily opened, the auxiliary valve being first opened or raised, so as to uncover its seat and allow water to pass through the main valve into and so as to fill the hydrant.

In the drawings, A denotes the cylindrical body of a hydrant, such body having arranged within it a valve-operating screw, B, to be revolved by a key, C, arranged in or applied to the cap D of the hydrant, and connected with the head of the screw by a "bayonet-connection," all as usual in street-hydrants, particularly in what is termed the "Lowry hydrant." The said screw engages with or screws into the stem E of the main valve F, applied to a

seat, G, at the lower end of the body A. A cross-head or guide, *a*, projecting from the stem in opposite directions, enters vertical grooves *b b* in the body A, and serves to hold the stem from revolving, and also to guide it rectilinearly in its vertical motions. On the lower part of the stem E, and below the main valve F, is the smaller or auxiliary valve H, it being fastened to the stem at a distance from the cross-head greater than the depth or thickness of the main valve, the same being in order that the main valve (which should slide freely on the stem) may move away from the auxiliary valve a short distance, and up against the cross-head or a shoulder formed on the stem. The main valve has on its lower surface or part a seat, *d*, for the auxiliary valve, there being from such seat one or more holes, *e*, made up through the main valve.

Fig. 3 represents a top view of the main valve with its inducts or holes *e*.

On turning the key to open the main valve the auxiliary valve will first be moved down away from the main valve, whereby water will rush through the inducts of the main valve and into and fill the body of the hydrant. On continuing to depress the valve-stem the cross-head *a* will be forced down against the main valve, and the latter, as the cross-head may further descend, will be pressed off its seat, so as to allow the water a free ingress into the body of the hydrant, and to pass from it out of the nozzle of the cap.

I claim—

In the hydrant, the combination of the auxiliary valve H with the valve-stem E and with the main valve F, provided with one or more openings, *e*, and arranged to slide on the said valve-stem from the auxiliary valve to a shoulder or cross-head, *a*, in the stem, all being substantially as specified.

MARSHALL BURNETT.

Witnesses:

R. H. EDDY,
J. R. SNOW.