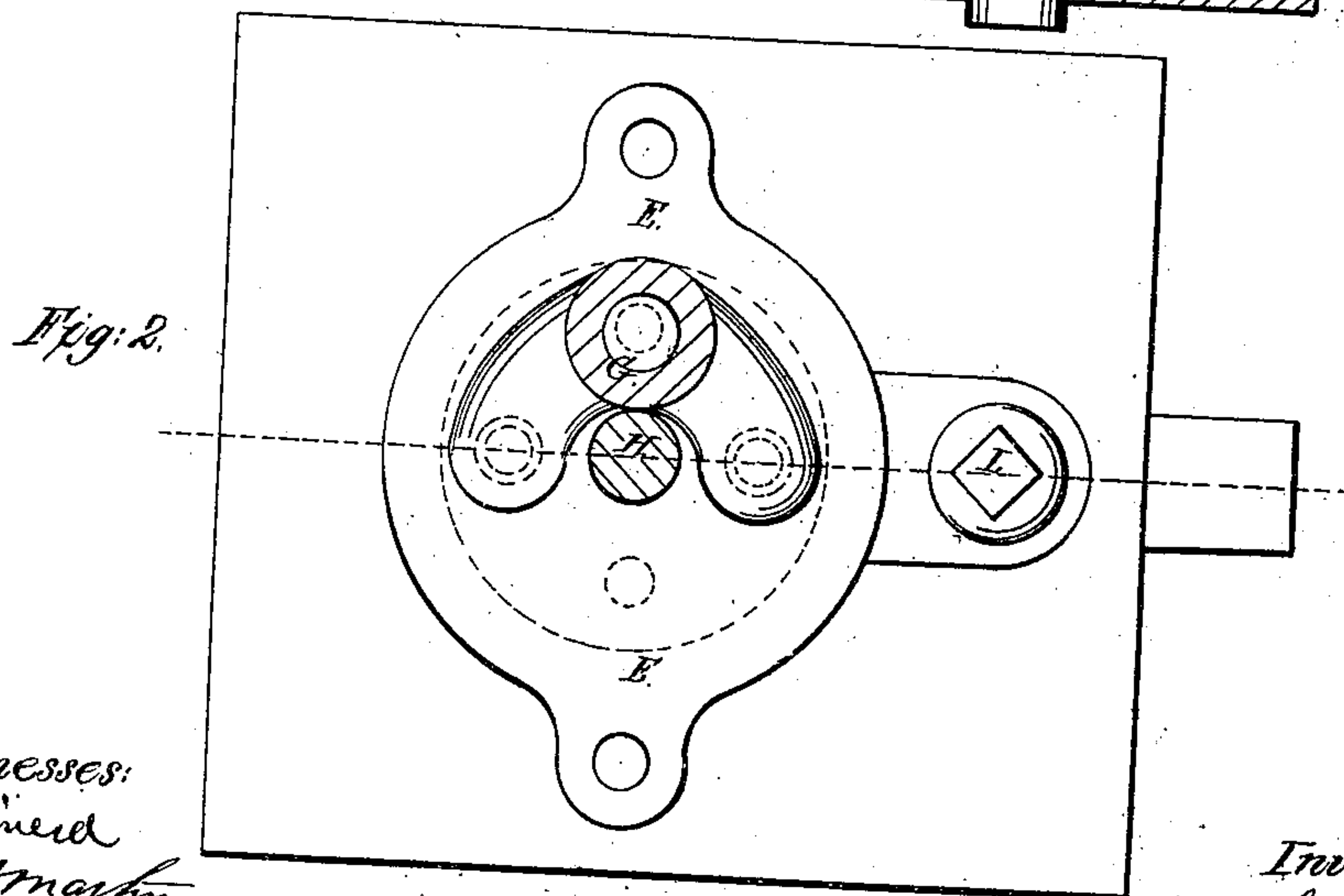
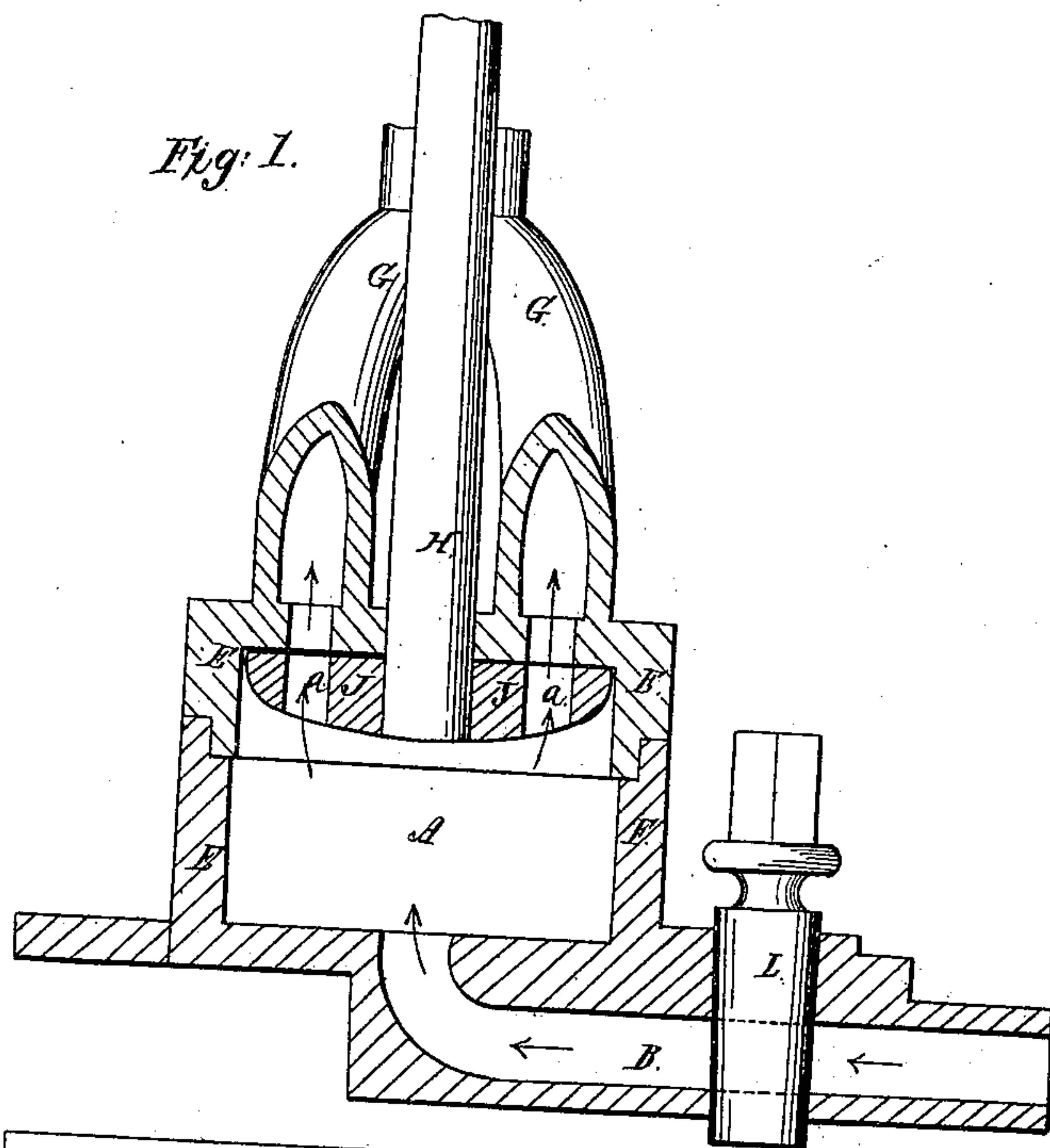


J. W. GUERNSEY.
HYDRANT VALVE.

No. 37,786.

Patented Feb. 24, 1863.



Witnesses:
J. Breinard
G. Martin

Inventor:
James W. Guernsey

UNITED STATES PATENT OFFICE.

JAMES W. GUERNSEY, OF TIOGA, PENNSYLVANIA, ASSIGNOR TO HIMSELF
AND H. A. GUERNSEY.

IMPROVEMENT IN HYDRANT-VALVES.

Specification forming part of Letters Patent No. 37,786, dated February 24, 1863.

To all whom it may concern:

Be it known that I, J. W. GUERNSEY, of Tioga, in the county of Tioga and State of Pennsylvania, have invented a new and useful Improvement in Hydrants; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a vertical cross-section taken through the hydrant with the valve-passages open, the arrows indicating the direction of the current of water through the same. Fig. 2 is a plan view of my hydrant.

The nature of my invention consists in arranging in a suitable chamber, under the discharge pipe or pipes, a rotary disk with two openings, which permit the water to escape up through them when they are brought to register with the discharge-openings in the head of the chamber, so that by turning said disk the water is shut off or let on, at the same time the disk or valve is suspended under a seat, and kept packed by the upward pressure of the water, as hereinafter described and represented.

A represents a cylindrical chamber, constituting the body of the pump. This chamber has an inlet-pipe, B, connecting with the branch pipe from the main, which opens in the center of the cylinder in the base of the hydrant. The cylinder, or rather the hydrant, is cast in two parts, E F. The cap E is bolted down to F and secured thereto water-tight,

and has a two-branch pipe, G, communicating with the interior of the chamber A, as clearly shown by Fig. 1. These pipes are so cast with the cap of the cylinder as to allow a rod or stem, H, to pass down through the center of said cap, to which is attached a circular disk or valve, J, with perforations *a a* through it, said perforations being opposite each other so that when the disk is rotated both holes will come opposite the branch discharges of pipe G simultaneously.

The force of water when cut off from the discharge-pipe G serves the office of packing the valve up snugly against its seat, which is the under side of the top of cap E. These parts, with the cock L, constitute the essential features of my invention, which, it will be seen, is exceedingly simple and compact, and will serve all the requirements of a good and cheap hydrant.

My invention is applicable for use with all kinds of liquids, gases, on steam-boilers, engines, and wherever valves are wanted.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The employment of the double-way cap E, constructed as set forth, in combination with the perforated disk-valve J, stem H, and chamber A, all in the manner herein shown and described.

JAMES W. GUERNSEY.

Witnesses:

J. BRAINERD,
S. H. MATHER.