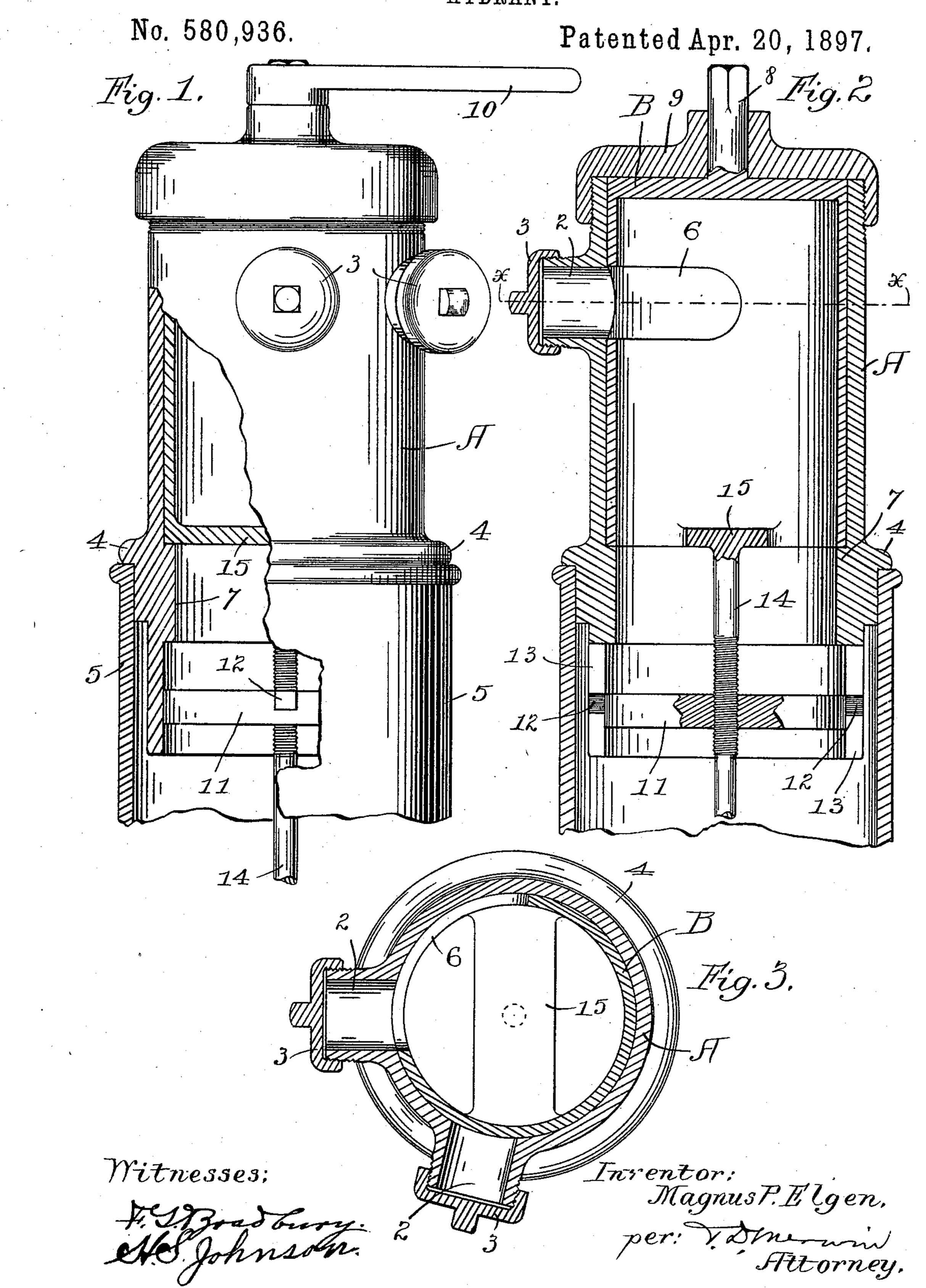
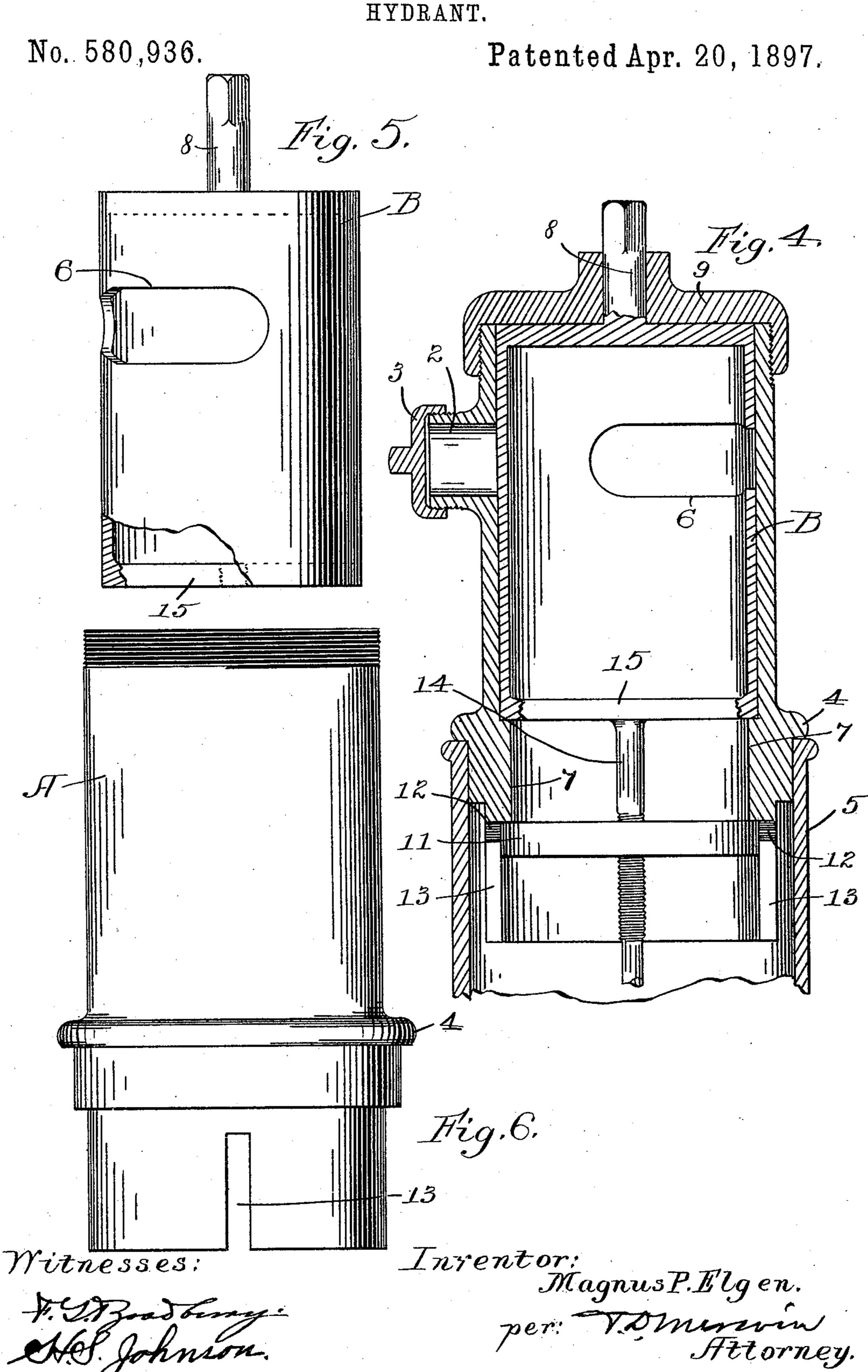
## M. P. ELGEN. HYDRANT.



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## United States Patent Office.

MAGNUS P. ELGEN, OF ST. PAUL, MINNESOTA, ASSIGNOR TO ELIAS CRONSTEDT, OF SAME PLACE.

## HYDRANT.

SPECIFICATION forming part of Letters Patent No. 580,936, dated April 20, 1897.

Application filed June 5, 1896. Serial No. 594,385. (No model.)

To all whom it may concern:

Be it known that I, Magnus P. Elgen, of St. Paul, Ramsey county, Minnesota, have invented certain Improvements in Hydrants, of which the following is a specification.

My invention relates to improvements in hydrants, its object being to provide an improved construction thereof in which the lateral plug-outlets are adapted to be gradually and successively opened, at the same time opening the gate to the main pipe. By means of my construction the supply is furnished through one gate and one of the outlets is adapted to be connected with the supply without connecting the others.

In ordinary constructions where more than one outlet is used a gate is provided for each outlet, since with the use of one gate the supply communicates with all the outlets and the hose must be coupled to all of them before the supply is turned on, or if this is not done the hose must be connected afterward against the pressure of water. With my invention the hose may be attached to one opening before the gate is opened, and after the gate is opened the hose may be attached to the other openings without meeting the pressure of water, since said openings are adapted to be successively connected with the sup-30 ply, as desired.

My invention further consists in the specific construction hereinafter more particularly described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a side elevation of a hydrant, partially broken away, embodying my invention. Fig. 2 is a central vertical section of the same with the valves open. Fig. 3 is a cross-section taken on line 40 x x of Fig. 2. Fig. 4 is a central vertical section of a hydrant embodying my invention with the valves in closed position. Fig. 5 is an elevation of the valve-sleeve, and Fig. 6 is a similar view of the outer cylinder or casing.

or body of the hydrant, provided with the lateral plug-openings 2, closed by caps 3. The body of the hydrant is formed with a circumferential flange or shoulder 4, adapted to rest upon the top of the pipe 5, which connects with the water-main. (Not shown.)

B represents the closed-top and open-bottom valve-cylinder, fitted within the casing A and formed with the horizontal slotted opening 6, which is adapted to be brought into 55 registering position with the plug-openings 2 by the turning of the valve-cylinder. This cylinder is supported by a circumferential flange 7 upon the interior of the casing A and is provided with a stud 8, projecting 60 through the head 9 of the hydrant, to which the wrench 10 is fitted, by means of which it may be turned. The bottom of the valve is held normally closed by means of the valve 11, fitting tightly in the casing A and pro- 65 vided with lateral lugs 12, working in the vertical slots 13 in the casing. The valve 11 is connected with the valve-cylinder B, so as to be raised or lowered thereby, by means of the rod 14, secured to the cross-bar 15 of the 70 valve-cylinder and screw-threaded through the valve 11. Thus as the valve-cylinder B is turned the valve 11 is raised or lowered, as the case may be, by means of the intermediate screw-threaded connection. The water 75 passes into the valve-cylinder B through the slots or ports 13 when the valve is lowered to permit, the supply being cut off when the valve is raised with its lugs 12 in contact with the upper ends of the slots.

The lower end of the rod 14 is connected with the valve between the hydrant and main, so that as the valve 11 is opened the inlet-valve is simultaneously opened, thus permitting communication between the main water- 85

pipe and the cylinder-valve B. In use the hose is ordinarily coupled to the plug-opening 2, adjacent one end of the slot 6. The valve-cylinder is then turned until the valve 11 is sufficiently open, the turning 90 of the valve-cylinder being stopped at such point that the slot 6 will be in registering position with said plug-opening. If afterward it is desired to use the other plug-opening, the hose may be attached to it, and when so 95 attached the valve-cylinder B may be turned so as to bring its slot 6 into registering position with said second plug-opening, at the same time further opening the valve 11. All of the plug-openings except the first one may 100 thus be kept cut off from the supply after the main inlet-valve and the valve 11 are

opened, communication with said plug-openings being successively established as desired.

While I have shown two lateral plug-openings, it is evident that any other number may be used without departing from the idea of my invention.

I claim—

1. The combination with a hydrant having two or more discharge nozzles or passages, of a cut-off device for opening and closing said discharge-passages successively and cumulatively, and a gate controlling the opening between said hydrant and the supply-pipe leading thereto positively operated by the movement of said cut-off device, substantially as described.

2. In a hydrant, the combination with its lateral plugs, of the closed-top and open-bot20 tom valve-cylinder fitted in said hydrant, said cylinder having a horizontal slotted opening in the plane of said plugs, and serving as a valve therefor, the valve interposed between said cylinder and the source of supply, and the positive screw-threaded connection between said cylinder and valve, whereby as said cylinder is turned to bring its slotted

opening successively into registration with said plug-openings, the inlet-valve is simulstaneously opened.

3. In a hydrant, the combination with its lateral plugs, of the closed-top and open-bot-

tom cylinder fitted within said hydrant, and having a horizontal opening in the plane of said plugs, the valve between said cylinder 35 and the source of supply, and the screw depending from said cylinder and threaded through said valve, whereby as said cylinder is turned to bring said slotted openings into registering position with one or any number 40 of said plug-openings, said valve is simultaneously operated to establish communication between the cylinder and source of supply.

4. In a hydrant, the combination with its lateral plugs, of the included hollow cylinder 45 having a horizontal opening in the plane of said plugs, and serving as a valve therefor, the valve interposed between the bottom of said cylinder and said source of supply, the lateral projecting lugs upon said valve fitting 50 in vertical slots in the sides of the hydrant-body, and the screw connection between said cylinder and valve, whereby as said cylinder is turned to cause its horizontal opening to register with one or any number of said plugs, 55 said valve is gradually lowered to allow the inflow of water through said vertical slots.

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

MAGNUS P. ELGEN.

Witnesses:

T. D. MERWIN,
MINNIE L. THAUWALD.