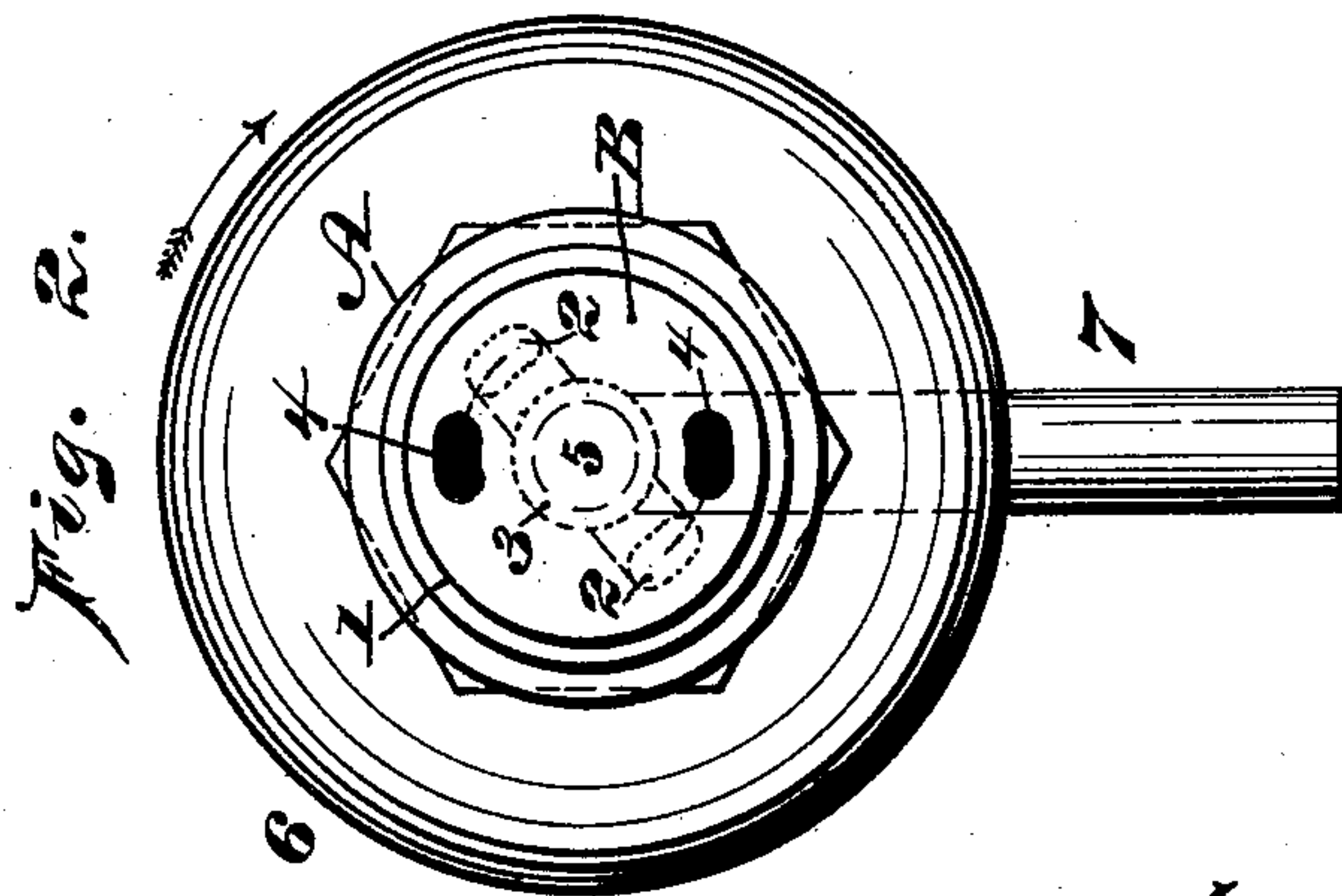
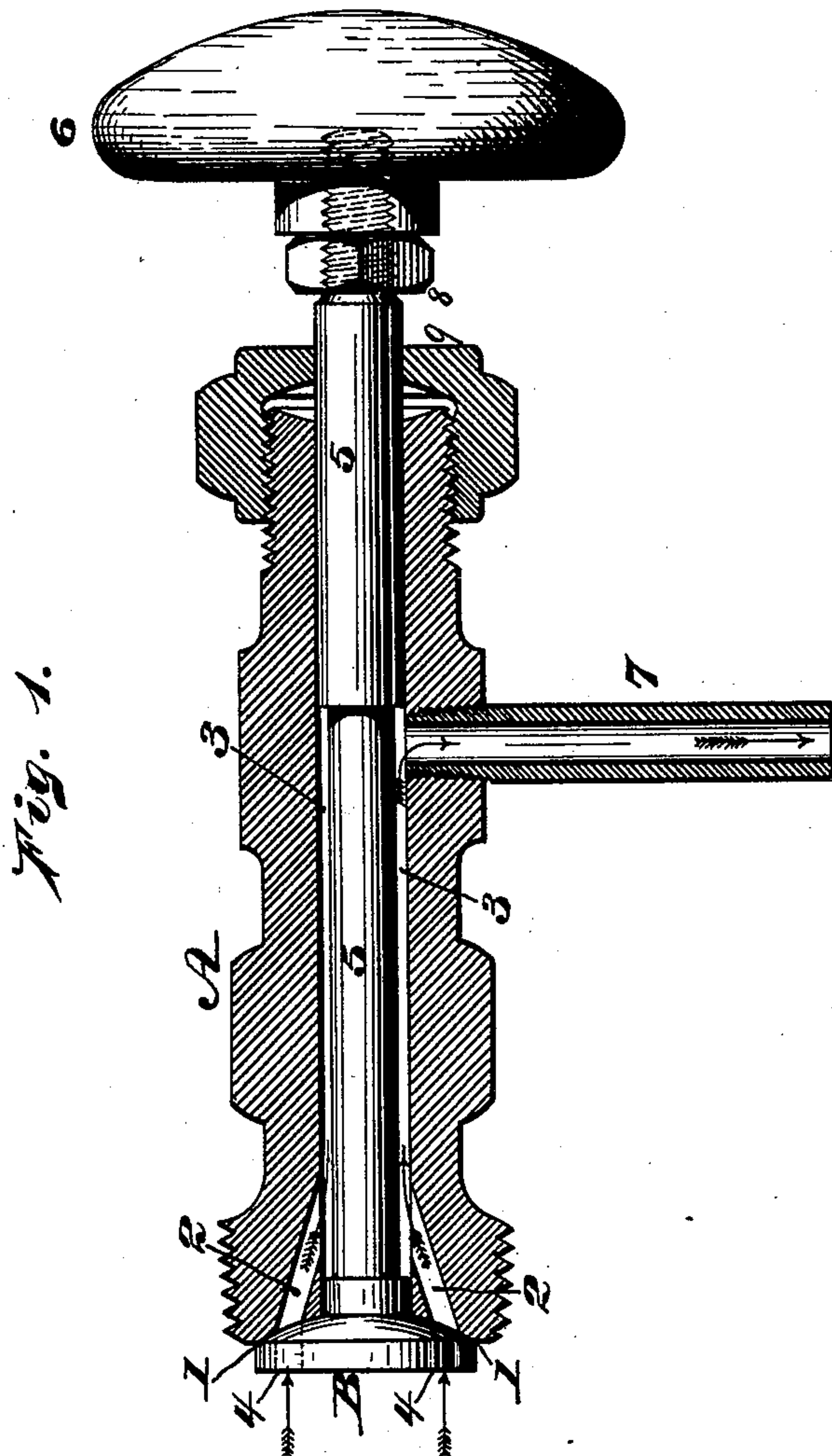


(No Model.)

J. P. STREBIG.
GAGE COCK.

No. 405,129.

Patented June 11, 1889.



Witnesses:
A. P. Jennings.
James F. Kelly.

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UNITED STATES PATENT OFFICE.

JOHN P. STREBIG, OF PHILADELPHIA, PENNSYLVANIA.

GAGE-COCK.

SPECIFICATION forming part of Letters Patent No. 405,129, dated June 11, 1889.

Application filed September 15, 1888. Serial No. 285,486. (No model.)

To all whom it may concern:

Be it known that I, JOHN P. STREBIG, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Cocks, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in cocks; and it consists in constructing the same of the parts as herein described and claimed, whereby an inexpensive as well as durable device is formed.

Figure 1 represents a partial side elevation and partial vertical section of a cock embodying my invention. Fig. 2 represents a bottom plan or end view thereof.

Similar letters and numerals of reference indicate corresponding parts in the two figures.

Referring to the drawings, A represents the shell of a cock, and B the valve thereof. At the end of the shell is the valve-seat 1, and in opposite sides of the face of the same are ports 2, which communicate with the bore 3 of the shell. The ports 2 are inclined, as shown, so that the shell is not materially weakened by said ports. In the valve B are ports 4, which are so disposed that they may coincide with the ports 2 of the valve-seat. Passing freely through the bore 3 is the valve-stem 5, the outer end whereof is provided with a knob or handle 6, and connected with the side of the shell and communicating with the bore thereof is the discharge-nozzle 7. It will be noticed that the end portions of the valve-stem, or those nearest the knob and valve, fit snugly in the adjacent portions of the shell A, and turn therein, as in bearings, while the portion between the nozzle 7 and the ports 2 is of reduced diameter, so that the steam or water may have free passage in the shell to said nozzle. It will be seen that one face of the valve is exposed to the steam or water, whereby its other face is held by pressure against the valve-seat. When the valve is turned so that its ports are removed from the ports of the seat, it is evident that steam or water is prevented from passing through the cock. When, however, the valve is turned so that the two sets of ports are in

communication, steam or water is permitted to escape through the valve and valve-seat, enters the bore of the shell, and from thence reaches the nozzle 7, by which it is discharged.

The cock is of simple and inexpensive construction, reliable in action, and easily operated by rotation of the valve, it being noticed that the valve remains on its seat both in opening and closing the cock, and does not require to be forced against the steam or water when the cock is to be opened. The valve, however, may be moved from its seat, so that should there be sediment on the valve or seat it will be removed by the incoming steam or water, it being noticed that the valve-stem is permitted to slide in the shell, in the present case, the distance from 8 to 9.

I am aware that it is not new to construct a cock consisting of a shell having a longitudinal chambered portion at one end and a removable plug at the other end, the inner walls of the said parts serving as bearings for a valve-rod of substantially uniform thickness, the head or valve of said rod having openings therein adapted to register with the chambers of the shell, whereby the fluid may have access to the bore of the shell, and from thence to the discharge-pipe; but I am not aware that it is old to construct the shell with substantially a uniform bore and the ends of the rod of increased diameter, so that the ends of the rod have their bearings in the shell; neither is it thought to be old to form the inlet-ports of the shell inclined and leading into the bore between the thickened ends. The advantages of the construction shown and described by me are simplicity of parts, the doing away with a plug as a bearing, and, consequently, diminished cost.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A cock consisting of the shell A, provided with inclined ports at one end opening into the bore thereof, a valve having its seat on one end of the shell and provided with a stem having its end portions turning in the bore of the shell, its central portion being of reduced diameter, the said valve having ports coinciding with the ports of the

shell, and a nozzle leading from said bore, said parts being combined substantially as described.

2. A cock consisting of a shell provided with
5 inclined ports leading into the bore thereof, a valve with ports coinciding with the ports of the shell and provided with a stem having end portions of greater diameter than its central portion, and a nozzle leading from the
10 bore of the shell between the end portions of the stem, the end portions of the stem turn-

ing in the bore of the shell and the ports of the shell leading into the bore between the said ends, the said bore being of substantially uniform diameter, said parts being
15 combined substantially as and for the purpose set forth.

JOHN P. STREBIG.

Witnesses:

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A. P. JENNINGS.