

No. 834,784.

PATENTED OCT. 30, 1906.

J. J. WILBER.
VALVE.

APPLICATION FILED FEB. 15, 1906.

FIG. 1.

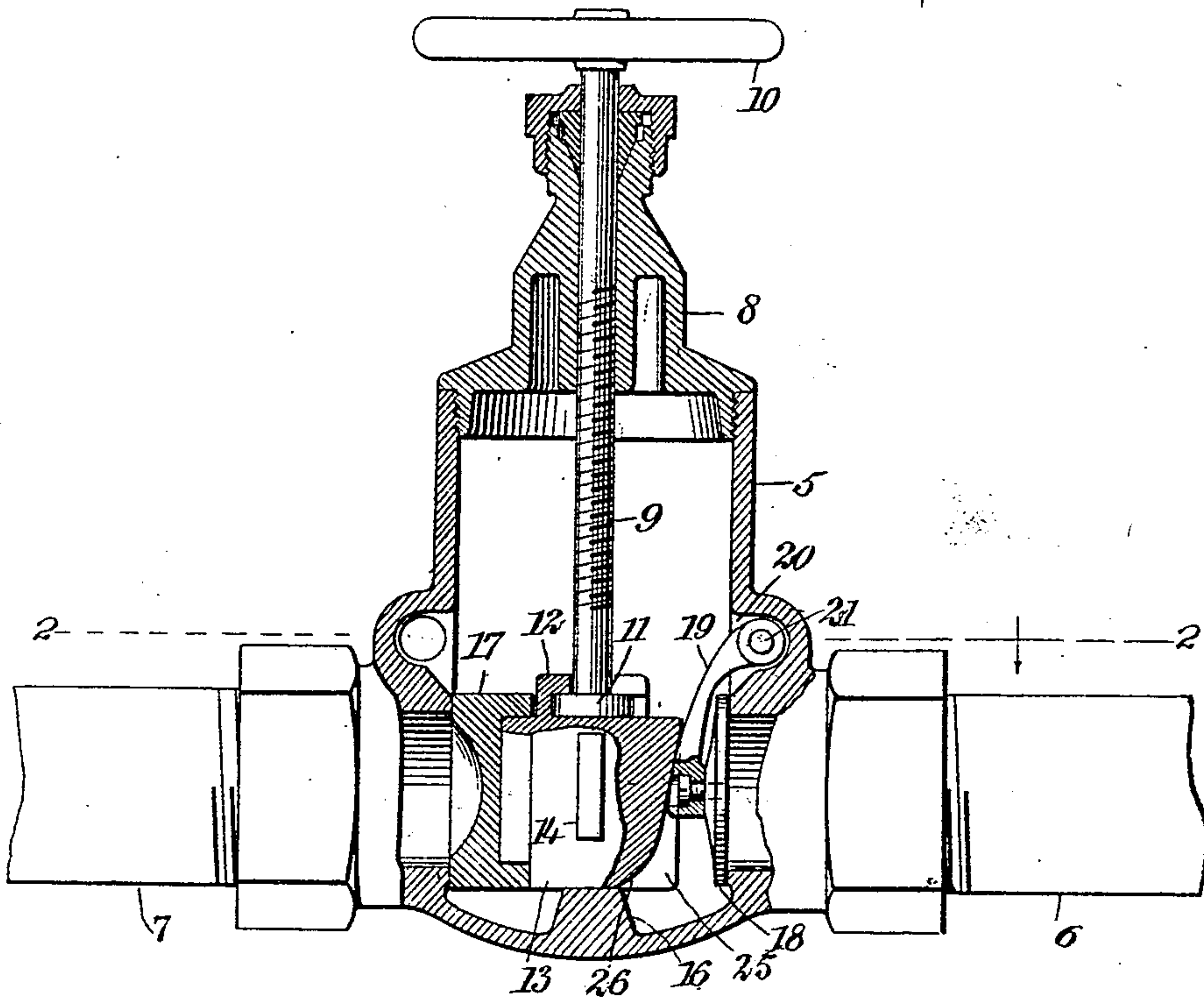
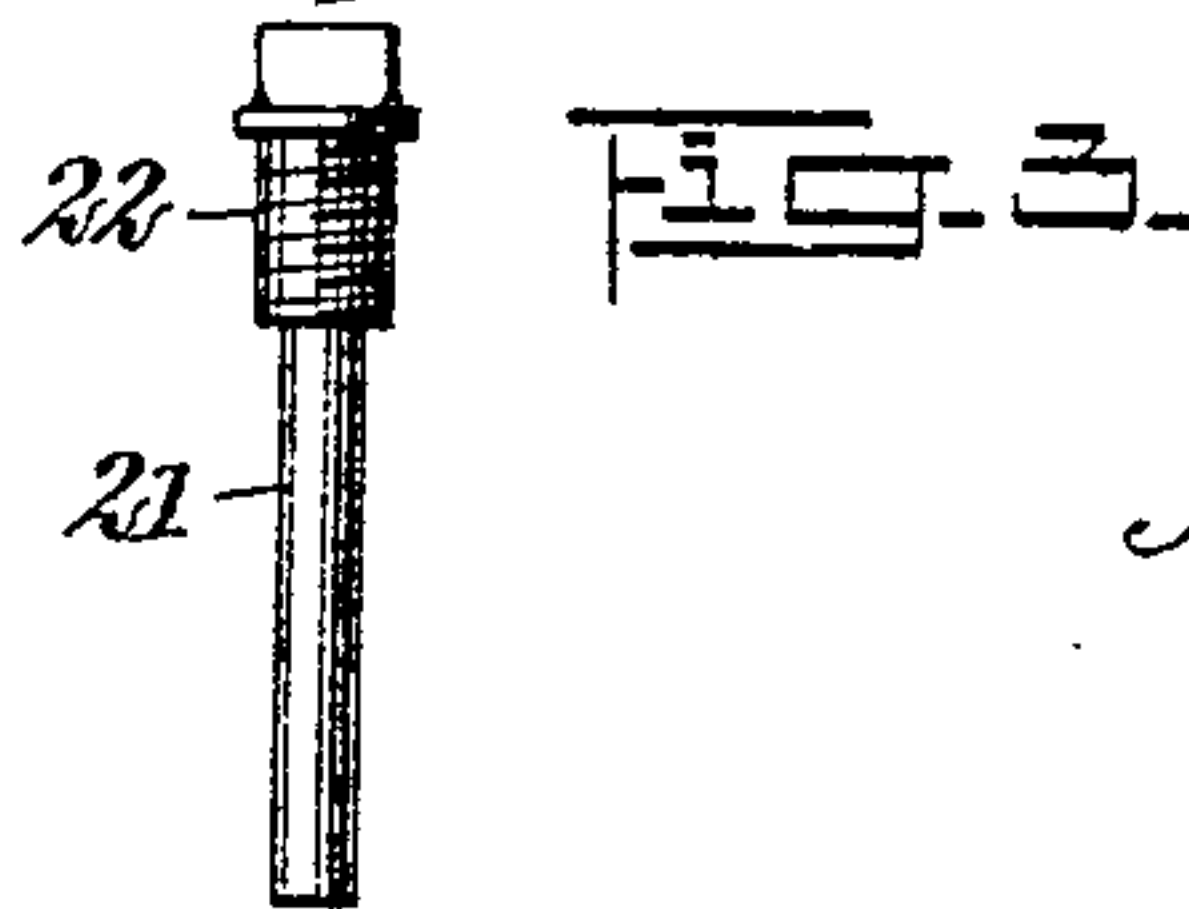
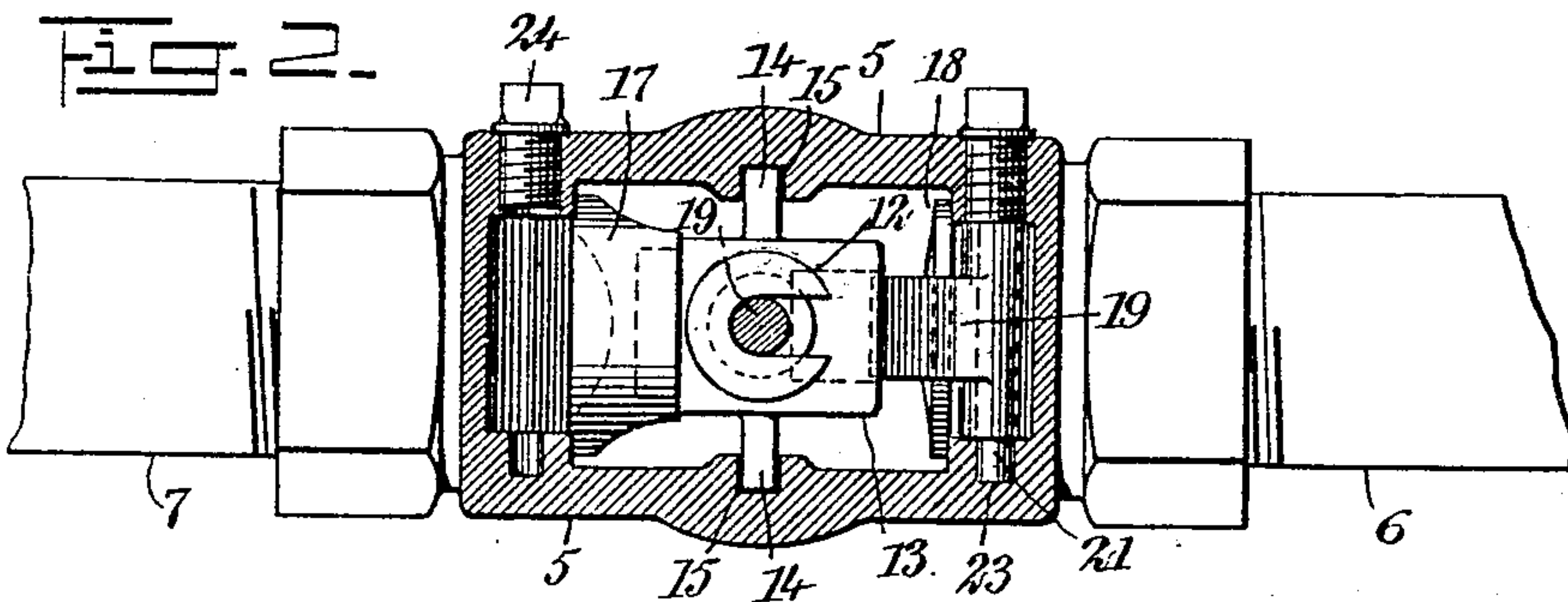


FIG. 2.



WITNESSES:

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JOSEPH JAMES WILBER, OF PERTH AMBOY, NEW JERSEY.

VALVE.

No. 834,784.

Specification of Letters Patent.

Patented Oct. 30, 1906.

Application filed February 15, 1906. Serial No. 301,160.

To all whom it may concern:

Be it known that I, JOSEPH JAMES WILBER, a citizen of the United States, and a resident of Perth Amboy, in the county of Middlesex and State of New Jersey, have invented a new and Improved Valve, of which the following is a full, clear, and exact description.

This invention relates particularly to combined gate and check valves, the object being to provide a valve mechanism that may be readily reversed, depending upon the direction of the flow of liquid through the pipes, and also constructed so that it may be easily repaired.

I will describe a valve embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional elevation of a valve mechanism embodying my invention. Fig. 2 is a section on the line 2-2 of Fig. 1, and Fig. 3 shows the pintle for the gate-valve.

Referring to the drawings, 5 designates the valve-casing, communicating at its lower portion and at opposite sides with pipe-sections 6 and 7.

The valve-casing at its upper end is provided with a removable bonnet 8, through which the threaded valve-rod 9 passes, the interior of the bonnet of course being provided with a thread to engage the thread of the rod. On the upper end of the rod is a hand-wheel 10, and on the lower or inner end is a head 11, which removably engages in a socket member 12 on a valve-controlling block 13. It will be noted that the socket member 12 opens outward at one side, so that when removed from the valve-casing it may be removed from the valve-rod.

At opposite sides of the block 13 are guide-ribs 14, which engage in channels 15 in the walls of the valve-casing. The block is limited in its downward movement to properly seat the valves by lugs 16, extended upward from the bottom of the casing.

Detachably arranged on one side of the block 13 is a cap 17, which serves as a closure for one of the pipe members. As here shown

it is arranged to close the pipe members 7. The other pipe member or the inlet thereof into the valve-casing is controlled by a gate-valve 18, attached to an arm 19, having its upper end curved and extended into a recess 20, formed in the valve-casing. The arm is arranged to swing on a pintle 21, having an enlarged screw-threaded head 22 for engaging in a tapped opening in one wall of the casing, the inner end of the pintle being seated in a recess 23 in the opposite wall of the casing. It will be noted that a recess 20 is formed at each side, so that the gate-valve may be reversed or changed to either one of the pipe-sections. When the gate-valve is at one side, the tapped opening at the opposite side will be closed by a screw-block 24.

The block 13 is provided with a vertically-disposed channel 25, the inner wall of which is cam-shaped or curved, as indicated at 26, and with this inner wall 26 the swinging arm 19 is designed to engage.

In the operation upon raising the block 13 the pressure of liquid in the pipe-section 6 will move the gate-valve to open position. Then of course the liquid will pass through the valve-casing and into the pipe-section 7. Upon a downward movement of the block the cam-surface 26 by engaging the arm 19 will move the gate-valve to its closed position.

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

1. A valve-casing having recesses in its opposite walls, a pintle adapted to pass through either one of said recesses, an arm mounted to swing on the pintle, a gate-valve carried by said arm, a block movable in the casing and having a cam-surface for engaging said arm, and means for moving said block in the casing.

2. A valve-casing having recesses in opposite walls, a pintle adapted to pass through either one of said recesses, an arm mounted to swing on the pintle, a gate-valve carried by the arm, a block movable in the casing and adapted to close the gate-valve, and a cap detachably arranged on the block opposite the side of the gate-valve.

3. A valve-casing, a removable bonnet at one end thereof, a screw-rod operating

through said bonnet, a block having rotary and detachable connection with the inner end of the rod, a gate-valve mounted to swing in the casing and adapted to be moved to
5 closed position by said block, and a cap detachably arranged on the block at the opposite side to that of the valve.

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

JOSEPH JAMES WILBER.

Witnesses:

GEO. H. COATES,
THOMAS GRIEVE.