N. B. CREIGHTON.

VALVE.

APPLICATION FILED SEPT. 29, 1908.

912,816.

Patented Feb. 16, 1909.

Fig. 1.

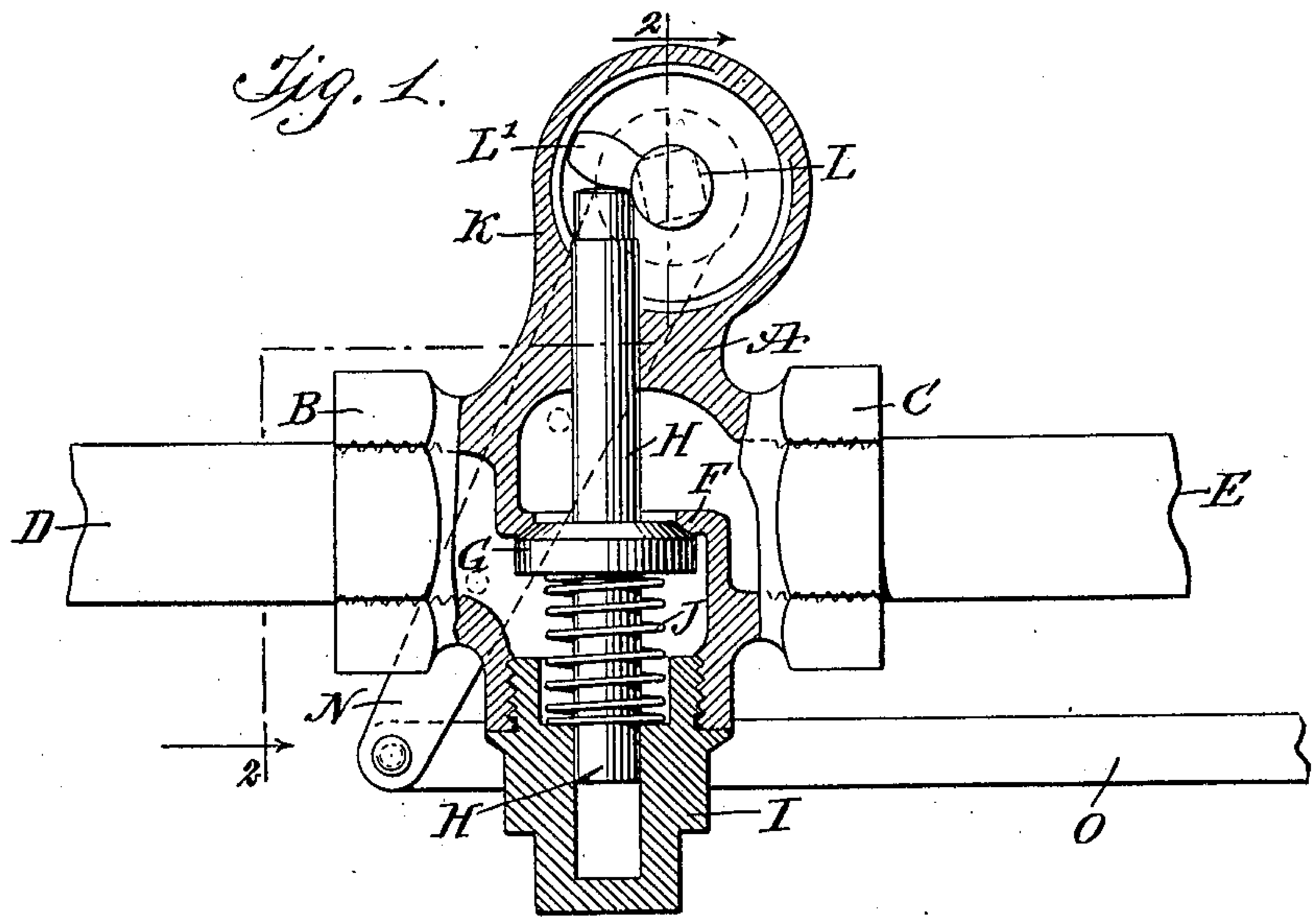
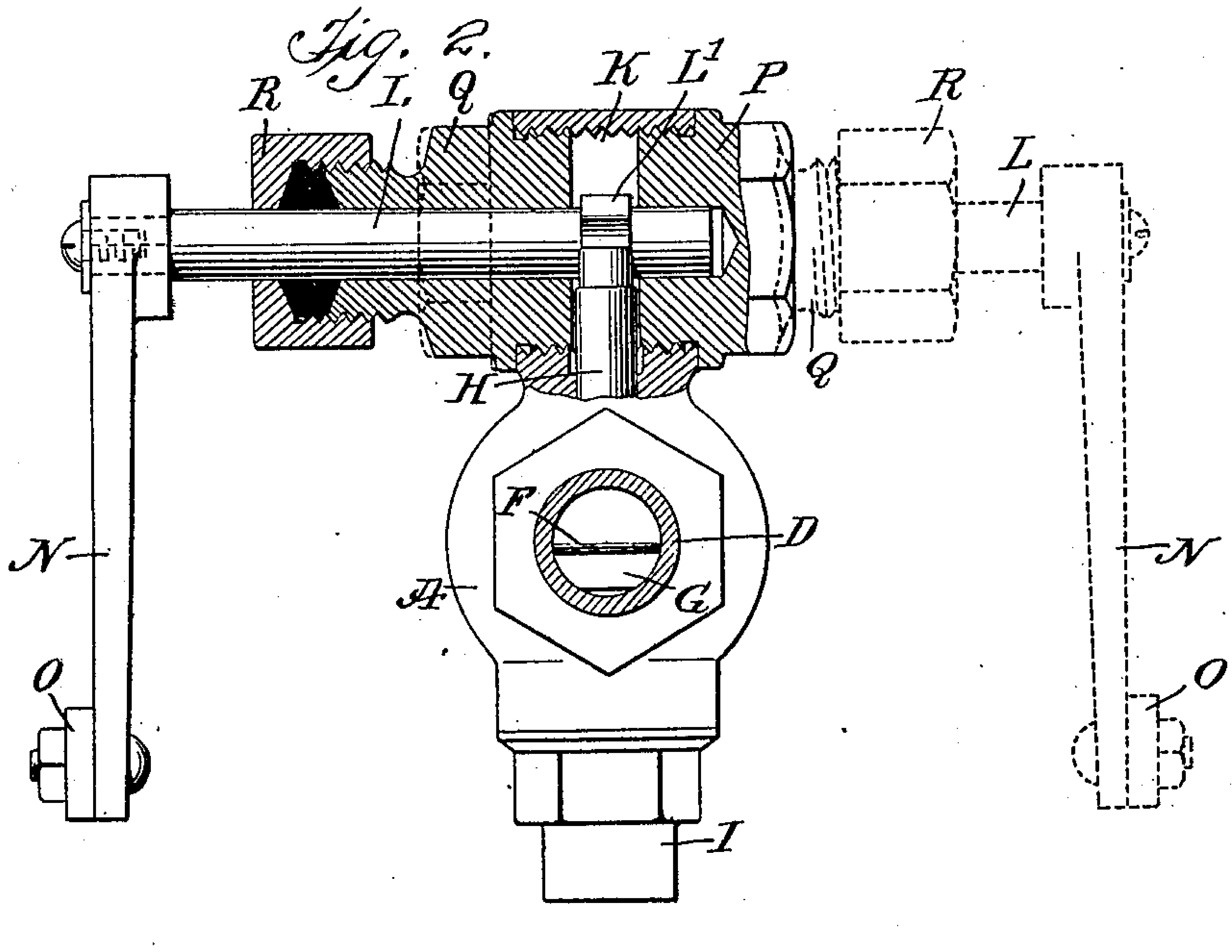


Fig. 2.



WITNESSES

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NELSON B. CREIGHTON, OF NEW YORK, N. Y.

VALVE.

No. 912,816. Specification of Letters Patent. Patented Feb. 16, 1909.

Application filed September 29, 1908. Serial No. 455,340.

To all whom it may concern:

Be it known that I, NELSON B. CREIGHTON, a citizen of the United States, and a resident of the city of New York, Maspeth, borough of Queens, in the county of Queens and State of New York, have invented a new and Improved Valve, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved valve, which is simple and durable in construction, very effective in operation, and arranged to reduce the friction of the moving parts to a minimum, to allow convenient opening and closing of the valve and to permit of interchanging the actuating parts for use on either side of the valve.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a longitudinal sectional elevation of the improvement; and Fig. 2 is a transverse section of the same, on the line 2—2 of Fig. 1.

The valve body A is provided with an inlet B and an outlet C connected with the pipes D and E, respectively, and intermediate the said inlet B and the outlet C is arranged a valve seat F, on which is normally seated a disk valve G having a stem H, on which is coiled a spring J, pressing the disk valve G, for normally holding the latter to its seat F. The end of the stem H carrying the spring J is mounted to slide in a bearing formed in a cap I, screwed on the valve A, to permit convenient removal of the valve disk G and the spring J for repairs or other purposes. The other end of the valve stem H has a bearing in the body of the valve body A and extends into a chamber K formed integrally on the valve body A, as plainly indicated in the drawings. The end of the valve stem H within the chamber K is engaged by a tooth L′ formed or secured on a rock shaft L, provided at one outer end with an arm N, connected by a link O with a lever or other mechanism for inparting a rocking motion to the said lever L, to cause the tooth L′ to press the stem H and thereby open the valve disk G against the tension of its spring J. When the lever is released the spring J returns the valve disk G to its seat F. The rock shaft L engages with one end a bearing formed in the inner end of a screw cap P, screwing in one end of the chamber K, the other end of the chamber being closed by a cap Q having a stuffing box R, through which extends the other portion of the rock shaft L. The caps P and Q can be readily interchanged on the end of the chamber K, to permit of bringing the actuating part, that is, the rock shaft L, to either side of the valve, as will be readily understood by reference to the full and dotted lines in Fig. 2.

By the arrangement described the valve stem H has two bearings, to insure proper movement thereof as described, and the rock shaft L likewise has two bearings to hold the rock shaft in true position and thus permit the tooth L′ to properly act on the end of the valve stem H when moving the valve disk G off its seat F.

The valve is very simple and durable in construction, and its parts are so arranged as to reduce friction to a minimum, and to insure long life of the working parts of the valve.

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

1. A valve, comprising a valve body having an inlet, an outlet, and a valve seat intermediate the said inlet and the said outlet, an extension on the said body and provided with a chamber, a valve disk adapted to be seated on the said seat and having its stem extending into the said chamber, a spring for normally holding the said valve disk to its seat, a rock shaft extending transversely in the said chamber, the latter being closed by removable and interchangeable heads in which the said rock shaft is mounted to turn, and a tooth on the said shaft within the said chamber and engaging the end of the said valve stem.

2. A valve, comprising a valve body having an inlet, an outlet, and a valve seat intermediate the said inlet and the said outlet, an extension on the said body and provided with a chamber, a spring for normally holding the said valve disk to its seat, a rock shaft extending transversely in the said chamber, removable and interchangeable heads for closing the ends of the said cham-

ber, one of the heads having a stuffing box for the passage of the said rock shaft, and the other head having an internal bearing for the inner end of the rock shaft, and a tooth on the said rock shaft within the said chamber for engaging the end of the said valve stem extending into the said chamber.

3. A valve, comprising a valve body having an inlet, an outlet and a valve seat intermediate the said inlet and the said outlet, an extension on the said body and provided with a chamber, a valve disk adapted to be seated on the said seat and having its stem extending into the said chamber, a spring for normally holding the said valve disk to its seat, a rock shaft extending transversely in the said chamber, removable and interchangeable heads for closing the ends of the said chamber, one of the heads having a stuffing box for the passage of the said rock shaft and the other head having an internal bearing for the inner end of the rock shaft, a tooth on the said rock shaft within the said chamber for engaging the end of the said valve stem extending into the said chamber, and a screw cap on the said body and having an internal bearing for the other end of the said valve stem.

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

NELSON B. CREIGHTON.

Witnesses:
GEORGE E. RYAN,
WILLIAM H. SMITH.