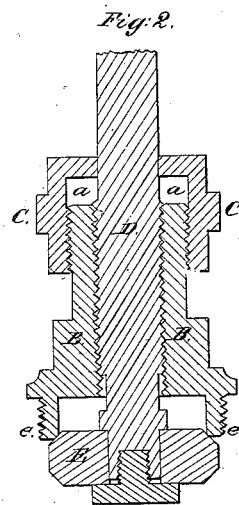
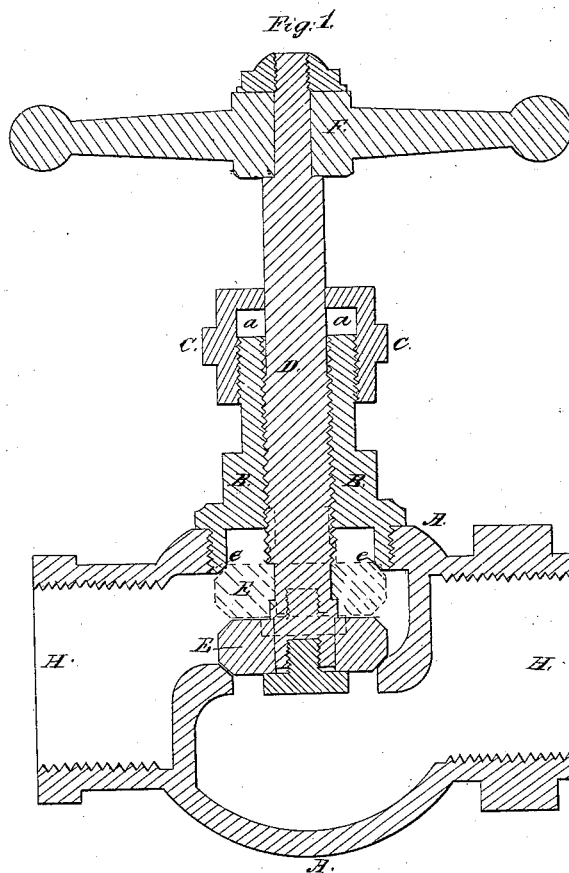


C. E. Ricker,
Globe Valve,
No 51,221, Patented Nov. 28, 1865.



Witnesses:
A. S. Whitney
Alvin Lawrence

Inventor.
Charles E. Ricker

UNITED STATES PATENT OFFICE.

CHARLES E. RICKER, OF LOWELL, MASSACHUSETTS.

IMPROVEMENT IN STEAM OR WATER VALVES.

Specification forming part of Letters Patent No. 51,221, dated November 28, 1865.

To all whom it may concern:

Be it known that I, CHARLES E. RICKER, of Lowell, in the county of Middlesex and State of Massachusetts, have invented a new and useful improvement in the valves which are used in connection with steam or water pipes for regulating the supply of steam or water passing through the same; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a vertical central section of my invention applied to a globe-valve. Fig. 2 is detached section of the same.

Similar letters of reference indicate corresponding parts.

My invention consists in providing a valve-seat in that end of the valve-stand which screws into the shell, and in so forming the top side of the annular disk-valve that by rotating the spindle in the right direction the disk-valve is forced upward against the said valve-seat, thus shutting off the steam or water from the spindle so as to allow the packing-nut to be removed, new packing placed within the stuffing-box, and the packing-nut replaced, without shutting off the steam or water from the pipes.

I construct the shell A A of my improved valve in any convenient form, and generally of that form known as a globe-valve, and apply thereto a stand, B, packing-nut C, stem or spindle D, with the annular-disk valve E attached to the lower end of the spindle, as usual, also, a wheel, F, on the top end of the spindle, by which the latter is turned to raise or lower the valve E.

In the use of the ordinary valve for regulating the supply of steam or water or other fluid, by frequently turning the spindle up and

down through the packing in the stuffing-box *a a* the spindle and packing are both worn off, so that steam or water will escape around the spindle, rendering it necessary to renew the packing in the stuffing-box, which can only be done by shutting off the steam or water from the pipes.

In carrying out my invention I provide a valve-seat, *ee*, at the lower end of the stand B, and chamfer the top corner of the annular disk-valve E, so as to fit the seat *ee* in such a manner that steam or water cannot pass between the valve and seat.

When it is necessary to renew the packing in the stuffing-box *a a*, the valve is drawn upward against the seat *ee*, the packing-nut C is removed, new packing placed within the stuffing-box *a a*, and the packing-nut C replaced, without shutting off the steam or water from the pipes.

By means of the screw-thread upon the spindle D, working in a corresponding thread within the stand B the valve E is moved up or down to regulate the supply of steam or water passing through the pipes, which pipes screw into the ends H H of the shell.

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

The combination and arrangement of the stand B, with the valve E, spindle D, packing-nut C, and wheel F, whereby the steam or water may be shut off from the spindle, and its packing renewed without interrupting the passage of steam or water through the pipe, substantially upon the principle and in the manner herein set forth.

CHARLES E. RICKER.

Signed in the presence of us.

J. S. WHITNEY.

ALVIN LAWRENCE.