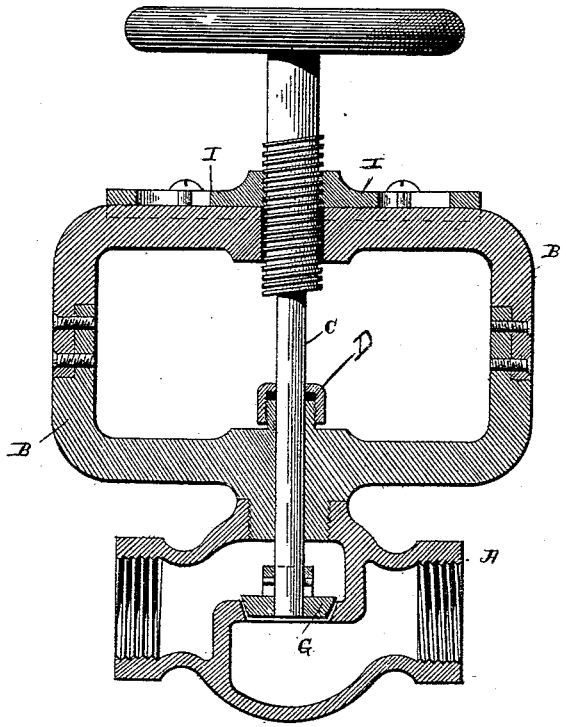
(No Model.)

S. C. BERRY.

GLOBE VALVE.

No. 457,629. Patented Aug. 11, 1891.



WITNESSES.
Geo. E. Frech.
J. M. Nesbit.

INVENTOR.
S. C. Berry
per Lehmann & Patterson
Attys

UNITED STATES PATENT OFFICE.

SELBY C. BERRY, OF WILLIAMSTOWN, WEST VIRGINIA.

GLOBE-VALVE.

SPECIFICATION forming part of Letters Patent No. 457,629, dated August 11, 1891.

Application filed April 2, 1891. Serial No. 387,411. (No model.)

To all whom it may concern:

Be it known that I, SELBY C. BERRY, of Williamstown, in the county of Wood and State of West Virginia, have invented certain new and useful Improvements in Globe-Valves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in globe-valves; and it consists in the combination of a frame, which is screwed upon the top of the body of the valve, the valve, the valve-spindle, and the slotted and threaded sliding blocks placed upon the top of the frame, as will be more fully described hereinafter.

The object of my invention is to produce a globe-valve in which the valve can be ground to its seat without the necessity of lowering the pressure of the steam.

The accompanying drawing represents a vertical section of a globe-valve which embodies my invention.

A represents the body of the valve, and screwed into its top is a frame B, either of the shape here shown or any other that may be preferred. This frame may either be made in one solid part or it may be made in two parts and the parts be screwed or bolted together in any suitable manner. Through the center of the frame is made an opening, through which the valve-spindle C passes, and which spindle is made largest at its upper end. Formed as a part of the frame B is a packing-box D, which prevents leakage of steam or water around the spindle. To the lower end of the spindle is loosely connected the valve G, either in the manner here shown or in any other that may be preferred. The valve and spindle are loosely connected together, so that when the spindle is turned the valve, which is hardened by any suitable process, will be turned with it and will freely adapt itself to its seat. Whenever the valve begins to leak, it is only necessary to turn the spindle until the valve has ground itself a seat through which no leakage can take place.

The upper large portion of the spindle C is made screw-threaded, as shown, and placed upon the top of the frame B, and engaging with the screw-threaded portion of the spindle at their inner ends are the two slotted adjustable blocks I. These blocks are grooved upon their under sides, so that they cannot turn out of a straight line with the frame B, and are adjustable back and forth thereon, so as to move their inner ends out of contact with or to bring them into contact with the threaded portion of the spindle C. When the blocks are moved back out of contact with the spindle, the spindle can be freely revolved for the purpose of grinding the valve. When the blocks are moved in contact with the threaded ends of the spindle, the spindle rises or falls as it is turned at the will of the operator. By means of this construction the valve can be freely ground at any time without having to shut off the pressure of steam or the necessity of removing any of the parts from their positions, with the exception that the set-screws which hold the sliding blocks I in position are loosened, so as to allow the blocks to be moved endwise.

Having thus described my invention, I claim—

1. In a globe-valve, the body of the valve, a frame mounted thereon, adjustable screw-threaded blocks mounted on said frame, the valve-stem, and the valve loosely connected thereto, the parts being combined to operate substantially as shown and described.

2. In a globe-valve, the body of the valve, the frame mounted thereon, the valve-spindle, the valve loosely connected to the spindle, adjustable slotted and grooved blocks placed upon the top of the frame, and which are screw-threaded at their inner ends, so as to engage with the threaded portion of the spindle, substantially as specified.

3. In a globe-valve, the valve-body, a frame of substantially rectangular shape mounted thereon, adjustable screw-threaded blocks

mounted on said frame, a screw-threaded projection extending upward from the lower side of said frame, and a packing-cap moving on the spindle and adapted to engage said screw-threaded projection, the parts being combined to operate substantially as shown and described.

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

SELBY C. BERRY.

Witnesses:
WARREN L. RUSSELL,
CHARLES HUNTER.