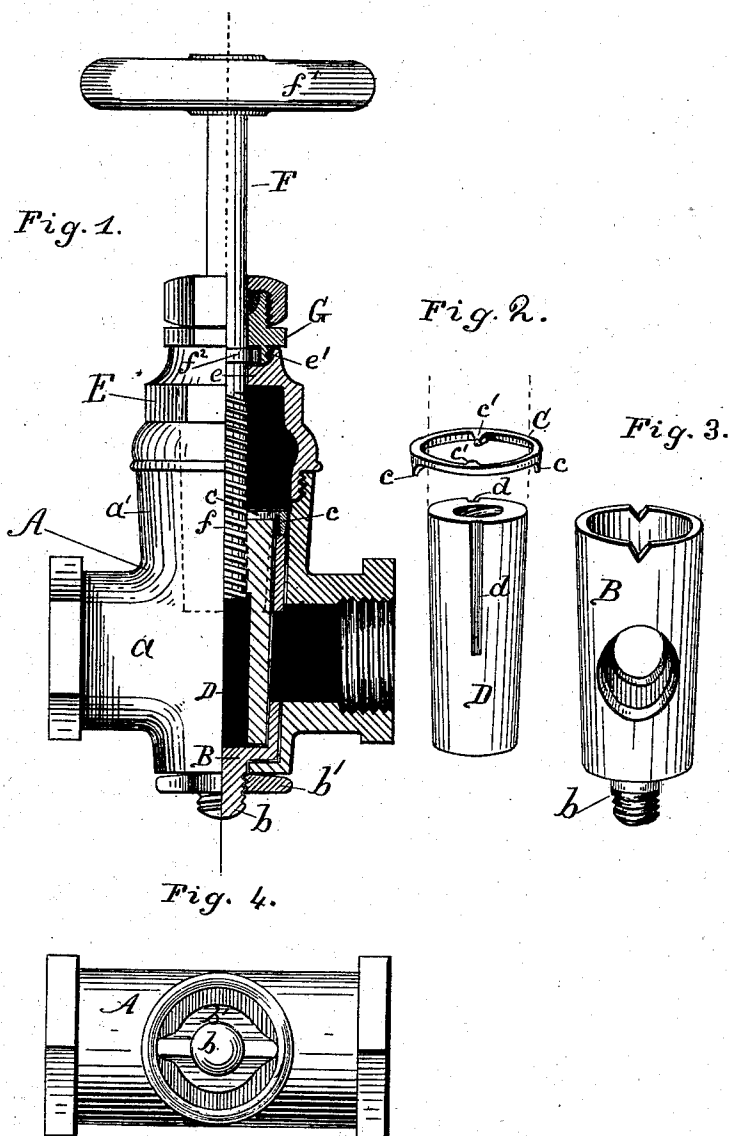


(No Model.)

G. REIMANN.  
GLOBE VALVE.

No. 269,111.

Patented Dec. 12, 1882.



WITNESSES:

Thos Houghton.  
John C. Kemou

INVENTOR:

Geo. Reimann  
BY *Wm. H. L.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

GEORGE REIMANN, OF QUINCY, ILLINOIS.

## GLOBE-VALVE.

SPECIFICATION forming part of Letters Patent No. 269,111, dated December 12, 1882.

Application filed May 4, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE REIMANN, of the town of Quincy, in the county of Adams and State of Illinois, have invented a new and useful Improvement in Globe-Valves; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved valve, with one-half in section. Figs. 2 and 3 are detail views, and Fig. 4 is a bottom view, of the same.

This invention has for its object the production of a globe-valve which shall be steam and air tight, and which also shall have a capacity for the renewal of those special parts which are exposed to wear without the renewal of the remaining parts; and it consists mainly in the combination of the various parts with each other, whereby the valve in its entirety possesses marked advantages, as will be fully described hereinafter.

In the drawings, A represents the shell or case of the valve, having the horizontal portion *a* with threaded ends, by means of which connection is made with the adjacent pipe-lengths, and the vertical portion *a'* with a plain interior surface, excepting at the upper end, which is threaded, as shown.

B represents a thimble adapted to fit snugly within the vertical portion *a'*, which is provided upon each side with an opening coinciding, when the thimble is in place, with the space in the horizontal portion which is provided for the passage of the steam.

*b* represents a projection upon the exterior surface of the closed bottom of the thimble, which is provided with screw-threads, and *b'* a screw-nut adapted to engage with the threads for the purpose of drawing the thimble tightly into the casing and holding it securely against vertical movement.

C represents a ring having vertical projections *c c*, fitting corresponding recesses in the upper edge of the thimble B and horizontal projections *c' c'*, as shown. By means of the vertical projections the ring is so united to the rigidly-held thimble B as to be incapable

of a revolving movement. By means of the horizontal projections the plug or finger hereinafter referred to is also held against revolution.

D represents the plug or finger, consisting of a conical block, which is provided with an internal left-handed screw-thread and with external recess, *d d*, extending in a vertical direction, as shown. When this plug is in position in the valve its recess *d d* coincides with the horizontal projections *c'* of the ring C, so that it is accurately guided in its vertical movement.

E represents a cap resembling a hollow cone in its general form, which is provided below with screw-threads adapted to engage with the screw-threads upon the upper end of the vertical portion of the casing, and at its upper end, in its interior space, with a bearing-shoulder, *e*, and the screw-threads *e'*, as shown.

F represents the screw-stem, consisting of a rod having at one end a threaded portion, *f*, adapted to engage with the corresponding part of the plug or finger D, and at the other end the usual handle-wheel, *f'*, as shown.

*f*<sup>2</sup> represents a shoulder near the center of the rod, which is adapted to bear upon the shoulder *e* of the cap E when the parts are in place.

G represents the usual threaded sleeve or collar on the stem F, by means of which the opening into top of cap F is closed.

The operation is substantially as follows: By turning the handle-wheel *f'* the bearing-shoulder *f*<sup>2</sup> of the stem is caused to revolve upon the bearing-shoulder *e* of the cap. By the revolution of the threaded portion of the stem the threaded plug or finger D, which is held against revolution by the extension of the horizontal projection *c'* of the guide-ring C into its recess *d d*, is caused consequently to travel in a longitudinal direction to open or close the passage-way through the cock. By simply grinding together the interior surfaces of the thimble B and the exterior surface of the plug D, an air and steam tight joint can be easily obtained. By grinding together also the exterior surface of the thimble and the interior surface of the vertical part *a'* of the case A, a tight joint may be obtained. This thimble

and plug also may be readily replaced when worn without renewing the other parts.

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

The cock described, having the shell or casing A, with the horizontal and vertical portions, as described, the thimble B, the guide-

ring C, plug D, cap E, and screw-stem F, all combined and arranged as and for the purpose to described.

GEORGE REIMANN.

Witnesses:

WM. BAUMHAUER,  
HENRY FLACHS.