

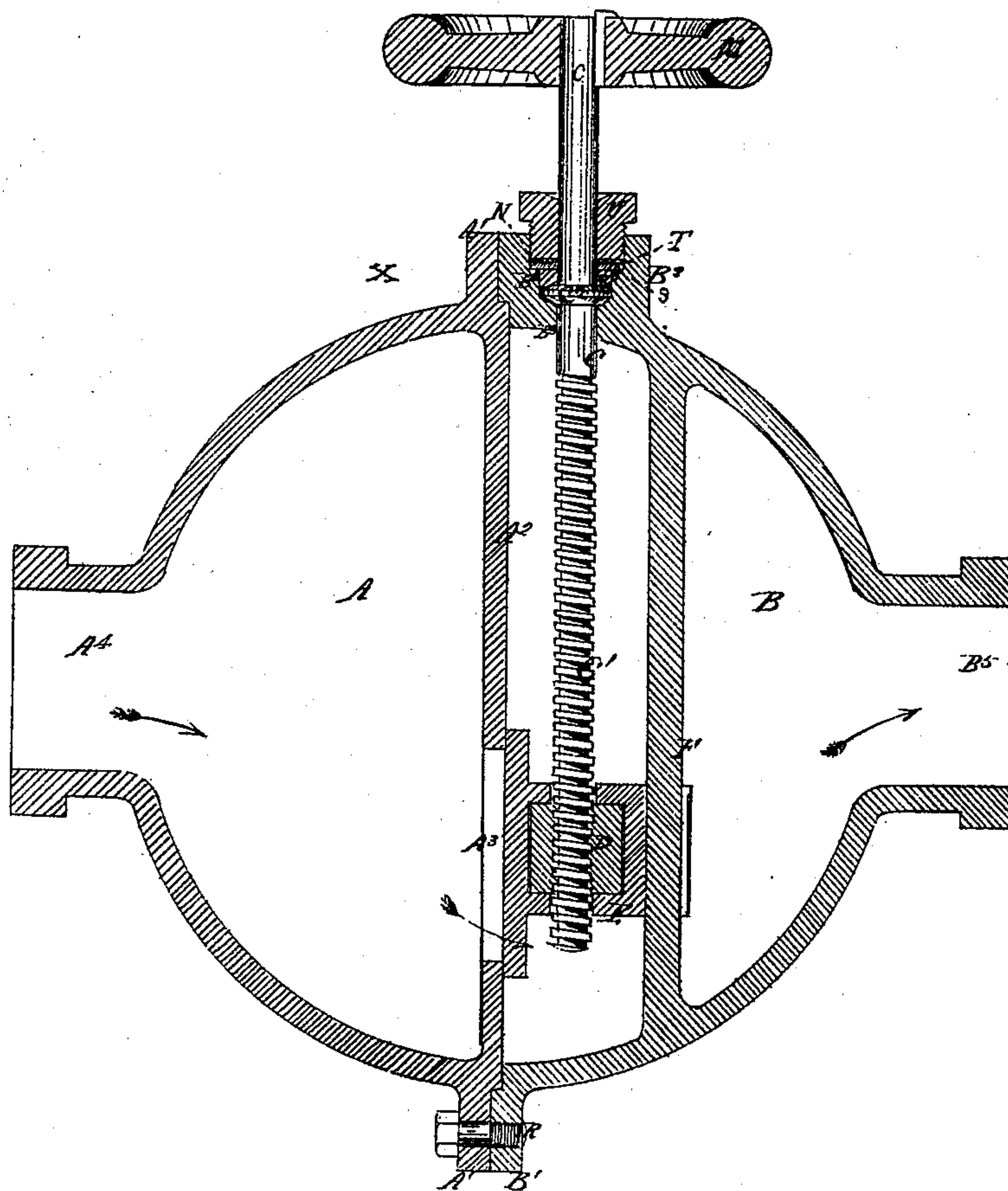
N. King,

Globe Valve.

No. 104,037.

Patented June 7, 1870.

Fig 1



WITNESS.
Percival Beckett
George Miller

INVENTOR.
Norman King

UNITED STATES PATENT OFFICE.

NORMAN KING, OF ETNA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND DANIEL HOMIRE, OF SAME PLACE.

IMPROVEMENT IN GLOBE-VALVES.

Specification forming part of Letters Patent No. 104,037, dated June 7, 1870.

To all whom it may concern:

Be it known that I, NORMAN KING, of Etna, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sliding Globe-Valves; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention relates to that class of globe-valves which have a sliding valve to close their inlets.

In the accompanying drawing, Figure 1 is a section of my invention.

Letters of reference denote parts.

The globe-valve X is constructed of two sections, A B, having corresponding flanges A¹ B¹, which, being connected together by bolts R or any such appliances, cause the outside casing thereof to be of a globular shape.

The section A is of a semi-globular form, having a diaphragm, A², extending and covering the face thereof, said diaphragm A² being provided with any suitable orifice, A³, and also projects from the face of the flange A¹, so as to facilitate the truing of the surface of said diaphragm A². The section A is furthermore provided with the ordinary inlet A⁴.

The section B is provided at its upper part with an enlargement, B¹, serving as a stuffing-box, which is bored out at the base thereof, B³, to admit of the passage of the valve-rod C, having ordinary screw-threads C¹ at its lower extremity, which engage in an ordinary nut, D, let in in any suitable manner to the back of the valve E, which is so arranged that its face will bear against the corresponding face of the described diaphragm A², the back of the valve E bearing against a vertical bearing-strip, F, lying between the upper and lower portions of the said section B, which is also provided with the ordinary outlet B⁵.

That part of the valve-rod C which lies immediately above the portion B³ of the section B has an enlargement or swell, C², its upper and lower faces being of a convex form, the stuffing-box B² being so bored to receive the same.

Lying above and on the same is a washer, R, its lower or under portion being concave,

its upper part being even, lying partly thereon; and partly on a flat portion, S, of the stuffing-box B² is an ordinary packing-ring, T, composed of gum or such like material. This packing-ring T is pressed down by an ordinary gland, U, through which the upper portion of the valve-rod C passes, said gland being provided with ordinary male screw-threads on its periphery, the upper part of the stuffing-box B² being provided with ordinary female screw-threads to receive the same. Said gland U, being tightly screwed down, prevents leakage. The upper part of the valve-rod C is provided with an ordinary hand-wheel, M.

If required, a metallic ring, N, may intervene between the said packing-ring T and the lower portion of the gland U, so as to prevent the latter from injuring, by cutting, the packing-ring T, the whole being so arranged that by rotating the wheel M the rod C, revolving thereby, raises and lowers the valve E, as the case may be, which being kept against the diaphragm A², by reason of bearing against the strip F, dirt or extraneous matter cannot get between the valve and its seat.

As such valves have been heretofore constructed, the stuffing-box has been provided with screw-threads, in which the valve-rod revolves, which is firmly attached to the valves.

The continual wear on the threads of the stuffing-box requires considerable repair.

By constructing valves as described by my invention, the thread being in a nut held by the valve, the wear is more slight, and, if worn, the nut can be readily replaced with but slight expense.

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

The valve-rod C, as described, with the valve E and nut D, in combination with section A, section B, with stuffing-box B², gland U, washer R, and packing-ring T, when constructed and operating substantially as described, and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

NORMAN KING.

Witnesses:

PERCEVAL BECKETT,
JOHN C. WOODHROD.