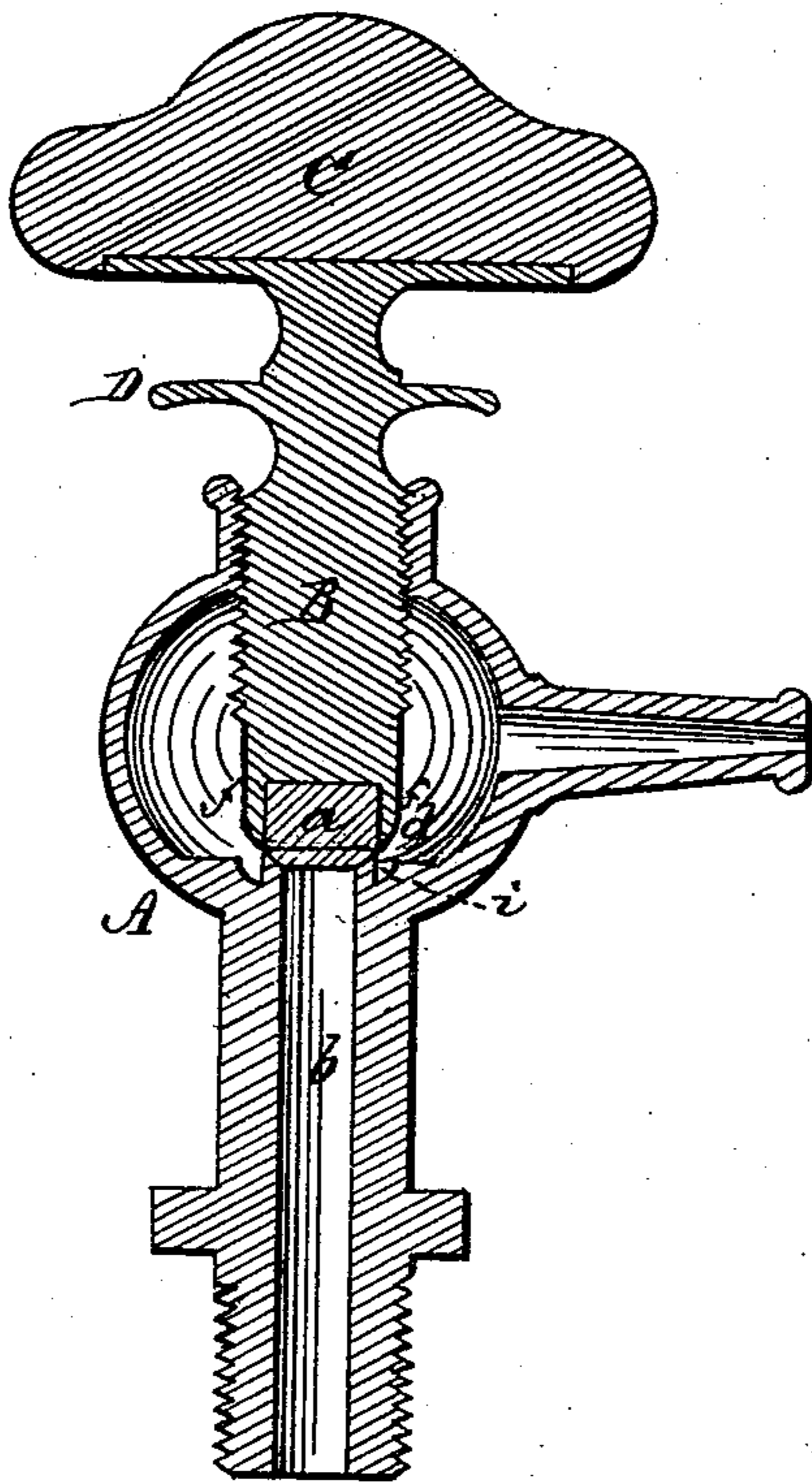


**J. SMITH.
Gage-Cocks.**

No. 155,115.

Patented Sept. 15, 1874.



WITNESSES.

C. M. Bart.
C. L. Ewert.

INVENTOR

Jonathan Smith
By *Alexander Mason*

Attorneys.

UNITED STATES PATENT OFFICE.

JONATHAN SMITH, OF TOLEDO, OHIO, ASSIGNOR TO JONATHAN SMITH & CO., OF SAME PLACE.

IMPROVEMENT IN GAGE-COCKS.

Specification forming part of Letters Patent No. **155,115**, dated September 15, 1874; application filed June 9, 1874.

To all whom it may concern:

Be it known that I, JONATHAN SMITH, of Toledo, in the county of Lucas and in the State of Ohio, have invented certain new and useful Improvements in Gage-Cocks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a gage-cock for steam-boilers, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a longitudinal vertical section of my improved gage-cock.

A represents the main stem or body of the gage-cock, made in the usual form on the outside. B is the stem to close the valve, and C is a wood handle on the stem. The stem B is screwed into the body of the gage-cock in the usual way. The inner end of the stem is drilled out and a wooden plug, *a*, inserted, projecting so as to close the opening and prevent the steam or water from blowing out through the hole *b* in the body of the cock. Around the hole *b* on the inside of the cock is cut a circular groove, *i*, a suitable distance from said hole to make it a raised seat, as shown at *d*. The rim *f* of the stem, around the plug *a*, is

made of suitable size, so as to close into the groove *i* when the plug wears down.

In use the steam will soften the wood plug, and as the screw-stem is turned the plug will be forced down into the seat, so that the rim or flanges *f*, which surround the upper part of the plug, will be brought down into the groove *i* and surround the outer edges of the valve-seat. The plug *a* being of wood is yielding enough to press down upon the seat *d*, which is made concave, so as to draw the same to the center, thereby making a perfectly-tight joint. This wooden plug can be taken out and a new one put in by any person. Around the stem B, outside of the main body of the cock, is a flange, D, cast on, of sufficient size, and made concave on the back side, which prevents the steam or water from blowing through to burn the hand of the operator in trying the same.

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

The combination of the body A, with concave seat *d*, hole *b*, and groove *i*, and the screw-stem B, with rounded wooden plug *a* and the projecting rim *f*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 26th day of May, 1874.

JONA. SMITH.

Witnesses:

A. N. MARR,
W. T. JOHNSON.