A. A. MURRAY.

Gage-Cocks.

No. 143,923. Patented Oct. 21, 1873.

Fig. 1.

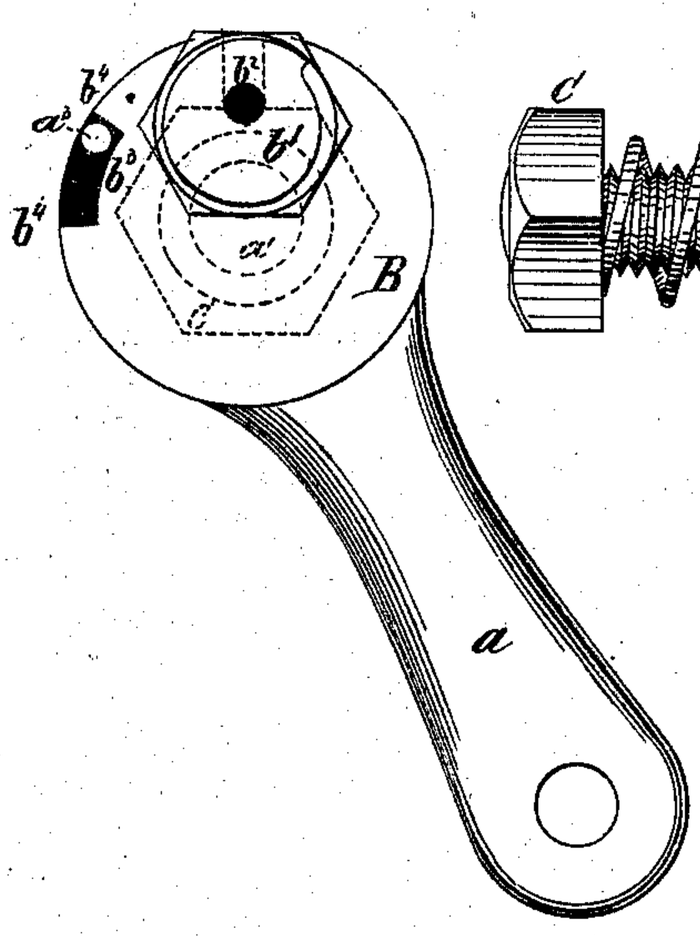
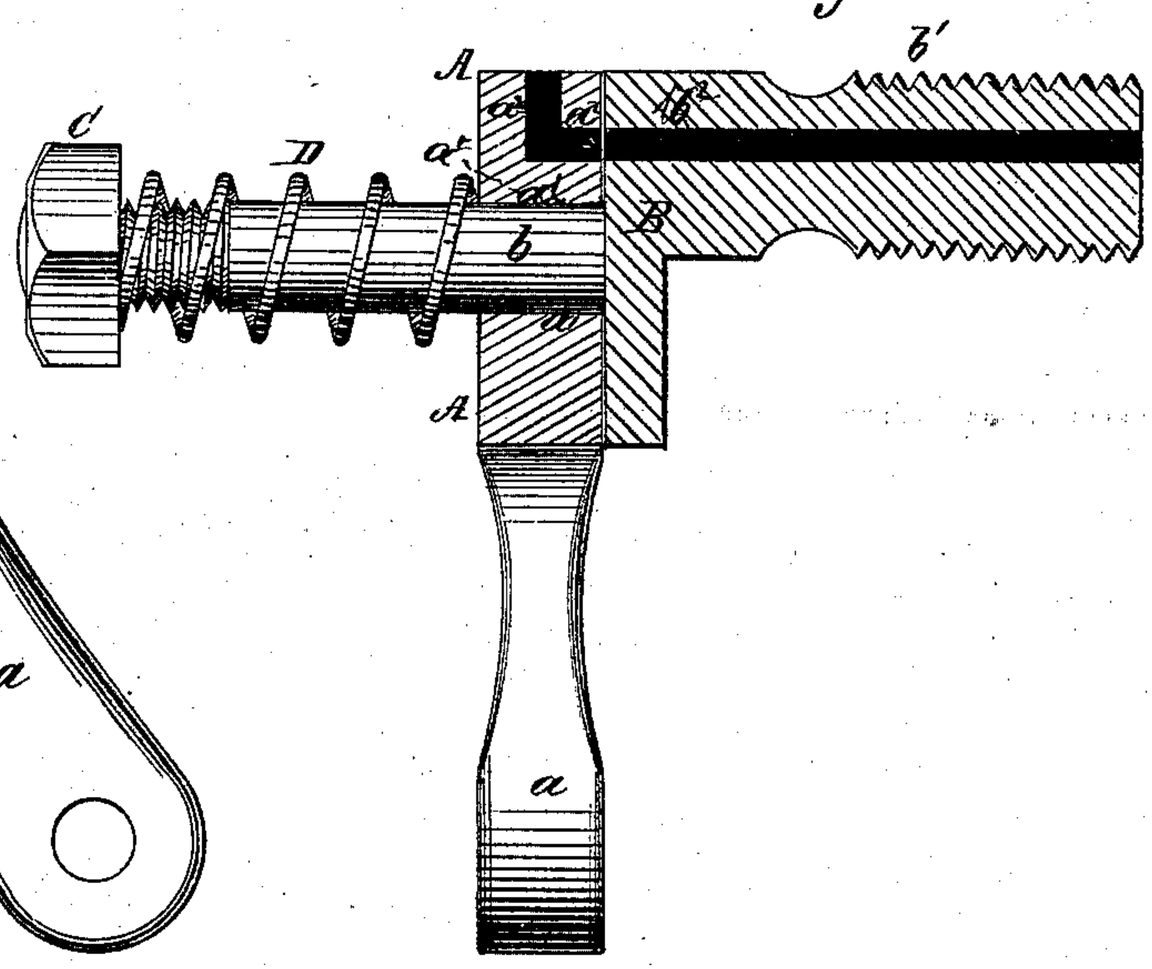


Fig. 2.



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UNITED STATES PATENT OFFICE.

ALBERT A. MURRAY, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN GAGE-COCKS.

Specification forming part of Letters Patent No. **143,923,** dated October 21, 1873; application filed August 15, 1873.

To all whom it may concern:

Be it known that I, ALBERT A. MURRAY, of Baltimore, Maryland, have invented a new and Improved Gage-Cock; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a plan, and Fig. 2 a sectional side elevation.

The invention relates to gage-cocks for steam-boilers; and consists in a novel relative construction of the parts, as hereinafter described and pointed out in the claim.

A represents the gage-valve, having the handle *a*, central hole a^1, and right-angled channel a^2. B is the valve-seat, having the rod *b*, on which the valve turns, and the tube b^1, both placed eccentrically thereon, and made, preferably, in one piece therewith. Through the disk and tube is the passage b^2, leading to the steam-space of boiler. C is a nut, between which and the top of valve A is located the spiral spring D, that holds the subjacent ground face of the valve to that of the valve-seat. By screwing down this nut more or less the tension of the spring may be increased or diminished. a^3 is a pin projecting from the valve, and working in a recess, b^3, and against two shoulders, b^4 b^4, of valve-seat B. This serves to limit the arc of vibration in which the valve can be moved.

The operation is as follows: When it is desired to use gage, the valve A is turned on its seat B until the passages a^2 b^2 register with each other. Here it will be automatically held by the spiral spring as long as may be desired. When the gage is no longer in use the valve is turned back until the passages are severally covered by the opposite faces of valve and seat, where it is again firmly held in position by the spiral spring.

I do not, of course, claim any novelty in the mode of operation, but simply in the mode of relatively constructing and arranging the parts so as to make a more convenient and durable gage.

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

The cock-valve A and seat B, the former arranged to rotate about the stem *b*, and having a passage, a^2, in combination with a spiral spring, D, that yields sufficiently to allow readily the rotation of the valve, and yet hold it in any position desired, as and for the purpose described.

Witnesses: ALBERT A. MURRAY.
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