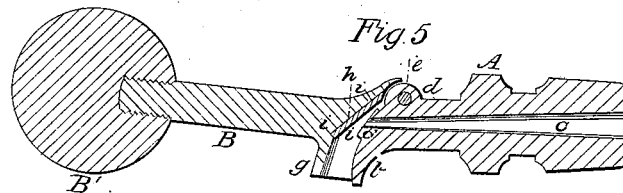
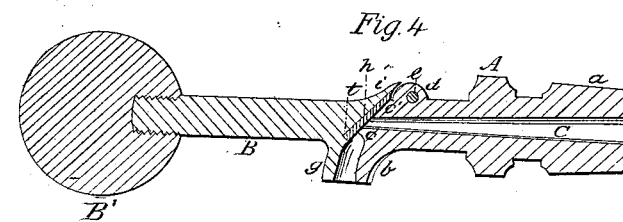
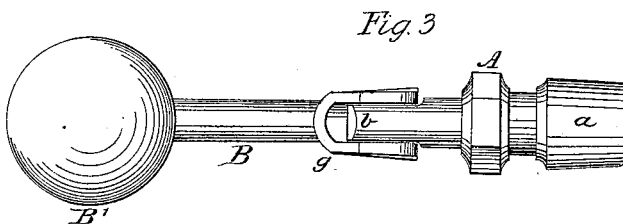
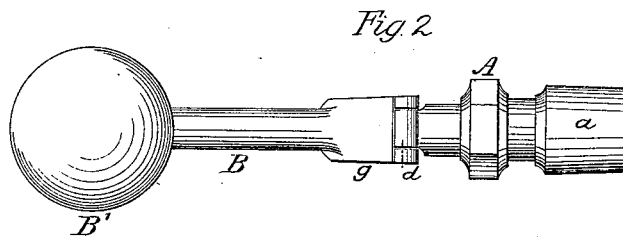
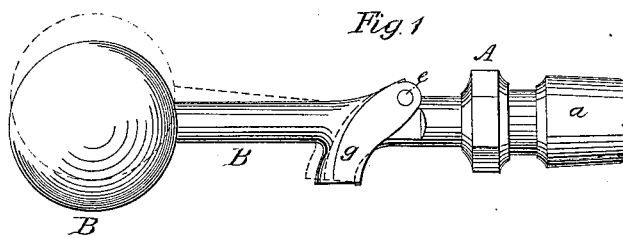


J. Regester,
Steam Gage Cock,
N^o 53,337, Patented Mar. 20, 1866



Witnesses

R. T. Campbell
E. Schaefer

Inventor

UNITED STATES PATENT OFFICE.

JOSHUA REGESTER, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN TRY-COCKS FOR STEAM-GENERATORS.

Specification forming part of Letters Patent No. 53,327, dated March 20, 1866.

To all whom it may concern:

Be it known that I, JOSHUA REGESTER, of Baltimore, in the county of Baltimore and State of Maryland, have invented a new and Improved Try-Cock for Steam-Boilers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the try-cock. Fig. 2 is a top view. Fig. 3 is a bottom view. Fig. 4 is a vertical section through the center of the cock when it is closed. Fig. 5 is a similar section, showing the cock open.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improvement on that class of cocks which are commonly used for trying the height of water in steam-boilers.

The object of my invention is to so construct steam try-cocks that a perfectly steam-tight joint can be made and preserved for a considerable length of time and the joint readily and cheaply repaired should it become leaky through long usage; also, to provide for closing the steam-vent of a cock by means of a loaded lever having a half-nozzle formed on it in such manner that this nozzle serves, in conjunction with a lip on the vent-stem, to direct the escaping steam or water downward, and thus prevent the accidental burning of the person testing the boiler, all as will be hereinafter described.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents the vent-stem of the cock, the portion *a* of which should be provided with a screw-thread, so that the stem can be secured tightly into the head of a boiler, or into the side thereof. The outer end of this stem is turned downward so as to form a curved lip, *b*, on the face of which, surrounding the vent *c*, is a slight projection, *c'*, the surface of which is inclined, as clearly shown in Figs. 4 and 5.

At the upper termination of the inclined face of the stem A is a projection, *d*, having a transverse eye through it, to receive a pivot-pin, *e*, that connects a lever, B, to the stem A and forms a joint for this lever. A hooded

lip or half-nozzle, *g*, is formed on the hinged end of the lever B, the sides of which receive between them the curved lip *b* of stem A and form a downward passage for the escape of steam and water issuing from the vent *c*.

The lever B has a ball of metal, B', on its outer end, the weight of which brings the valve *h* down snugly upon its seat and holds it there against the outward force of steam and water.

The valve *h* consists of a piece of india-rubber, or other suitable substance which is soft and durable, inserted into a recess, *i*, which is formed in the hooded end of the lever B, as shown in Figs. 4 and 5. The block of rubber has its edges beveled so as to hold itself firmly within the under beveled edges of the recess, thus preventing this block from casual displacement.

When the lever is down and the valve in its place this lever is in, or nearly in, a line with the axis of the stem A, as shown in Fig. 4, and the projecting valve-seat *c'* is embedded in the india-rubber valve *h*. Thus the pressure of steam in the boiler to which the cock is applied cannot lift the loaded lever nor escape from the vent at *c'*. By elevating the ball B' very slightly the steam or water, as the case may be, will escape from the vent at *c'* and issue from the lower end of the hooded lip *g*.

It will be seen from this description that I have no movable joint to wear out and allow steam to escape, as in try-cocks made before my invention; also, that the block *h* can be readily removed and another substituted in its stead when desirable.

The cock is easily operated and there is nothing to get out of order. Should the vent *c* become choked from any cause, the loaded lever can be thrown up and the vent cleared by forcing a wire through it.

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

The combination of the vent-stem A of the try-cock and the lever valve-stem B *g*, all constructed, arranged, and operating substantially as described, for the purpose set forth.

JOSHUA REGESTER.

Witnesses:

C. H. PALMER,
SAML. W. REGESTER.