H. A. CLINTON.

Gage-Cocks.

No. 152,337. Patented June 23, 1874.

fig. 1.

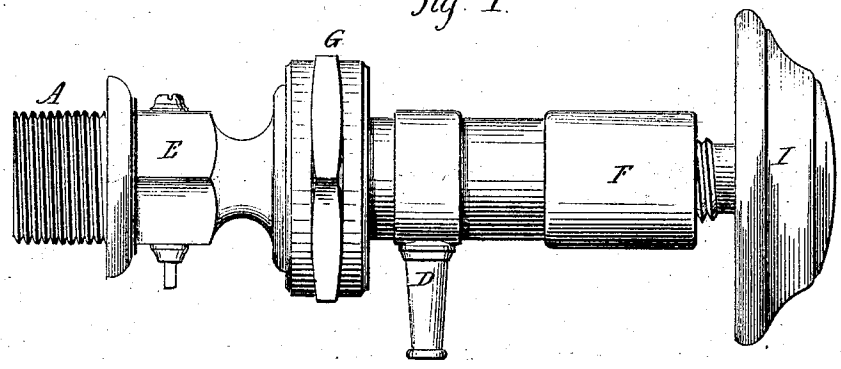
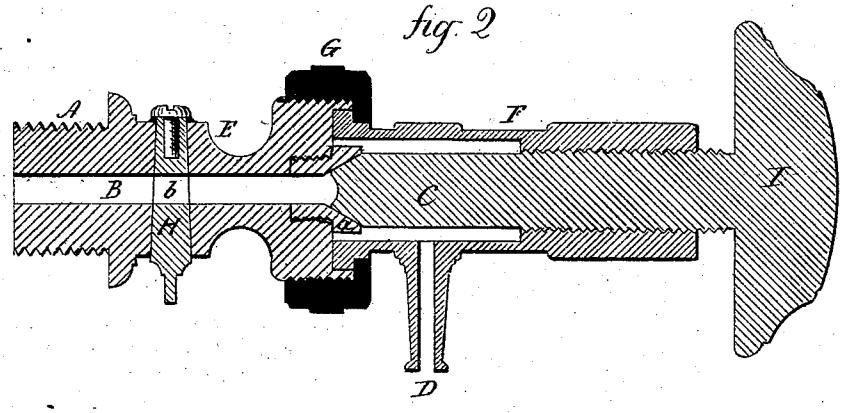


fig. 2.



Witnesses.
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AM. PHOTO-LITHOGRAPHIC CO. N. Y. (OSBORNE'S PROCESS.)

UNITED STATES PATENT OFFICE.

HENRY A. CLINTON, OF PAWTUCKET, RHODE ISLAND.

IMPROVEMENT IN GAGE-COCKS.

Specification forming part of Letters Patent No. **152,337**, dated June 23, 1874; application filed December 27, 1873.

To all whom it may concern:

Be it known that I, HENRY A. CLINTON, of Pawtucket, in the county of Providence and State of Rhode Island, have invented a new Improvement in Gage-Cocks; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification.

This invention relates to an improvement in what are known as gage-cocks—that is to say, cocks which are applied to steam-boilers as a means by which to ascertain a height of water in the boiler.

In these gage-cocks it frequently occurs that some foreign substance adheres to the seat or valve, or that one or the other, or both, becomes worn to such an extent that the valve cannot be closed tight, and the cock must be removed to be repaired or wait until the steam is down in the boiler to be cleaned.

The object of this invention is the construction of the cock so that the valve and its seat may be exposed and removed at any time without waiting for the steam to go down; and the invention consists in a gage-cock in two parts, secured together by a coupling, one part formed with a threaded shank, by which to be secured to the boiler, and provided with a removable valve-seat at the point where the two parts are connected, and a plug-cock between said valve-seat and boiler, the other part constructed with a nozzle, and threaded to receive the valve and guide it to the seat, all as more fully hereinafter described.

A is the shank, threaded in the usual manner, for securing the cock to the boiler. Through this a passage, B, leads to the valve-seat *a* and valve C, also in the usual manner, so that by turning or drawing the valve from the seat *a* communication will be opened with the boiler to allow steam or water, as the case may be, to pass out through the nozzle D. The valve is here represented as turned by a head, I, the valve-spindle threaded in the usual manner for this class of cocks. The cock is constructed in two parts, E F, the part E secured to the shank A, and has upon its outer end the valve-seat *a*. The other part, F, contains the valve C, and is secured to the part E by a coupling, G, attached to one part, and so as to screw onto the other, as seen in Fig. 2. Therefore, by disengaging this coupling from the one part, the part F may be removed with the valve and expose the valve-seat, the division of the two being, as seen in Fig. 2, in the immediate vicinity of the valve. In order that this separation may be made when the steam is up, I place in the part E a plug, H. The plug H is fitted in the usual manner for cock-plugs, with an opening, *b*, through it, so that when turned the opening *b* is in line with the passage B, and steam or water will flow freely through; but when turned at right angles thereto the passage B will be closed and the escape of steam or water prevented, so that if occasion requires any cleaning or repairing of the valve while in use the valve portion F may be removed by first closing the passage B. It frequently occurs that the valve-seat requires to be reground, and as this cannot be conveniently done on the boiler I make the seat in an independent piece, and threaded or otherwise fitted into the part E, so that when the part F is removed the valve-seat may also be removed.

I am aware that gage-cocks have been made in parts and with a plug between the boiler and valve. I therefore do not wish to be understood as claiming any of the parts except in the combination hereinafter specified.

I claim as my invention—

The herein-described gage-cock, consisting of the two parts E F, secured together by the coupling G, the part E formed with the threaded shank A, and provided with the plug H and removable valve-seat *a* at the point where the two parts are connected, the part F formed with the nozzle D and the valve C, all constructed and combined as described.

HENRY A. CLINTON.

Witnesses:
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