

B. E. LEHMAN & ROBERT ROSS.

Improvement in Gauge-Cocks.

No. 115,746.

Patented June 6, 1871.

Fig. 1.

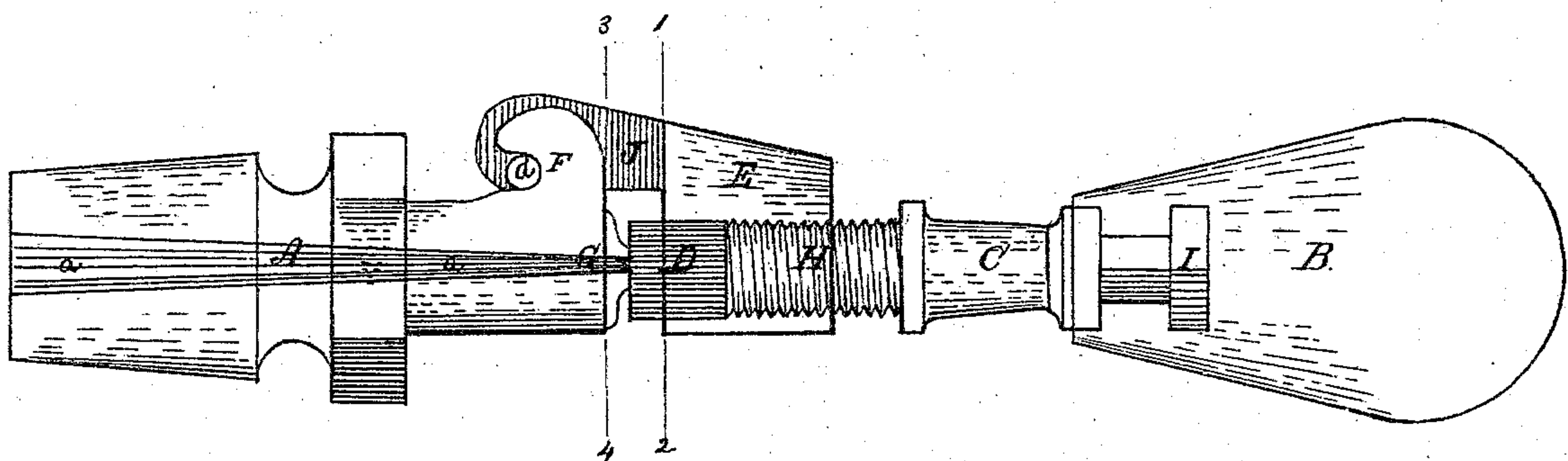


Fig. 3.

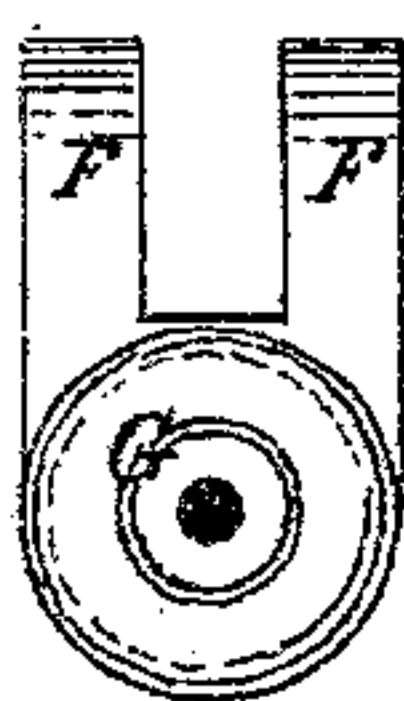
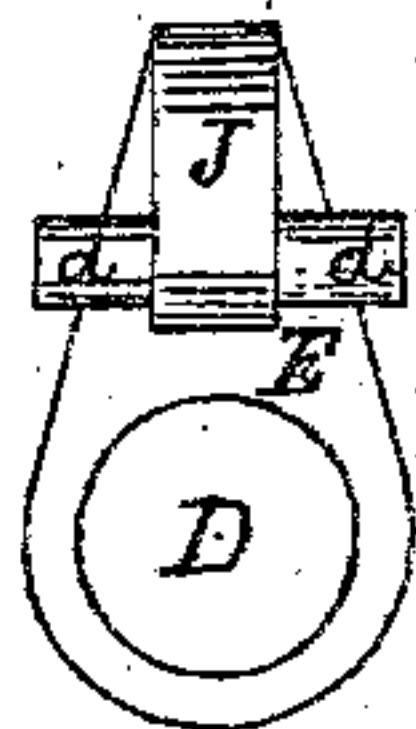


Fig. 2.



Witnesses.

R. A. Abbott

W. M. Wendell

B. E. Lehman

Robert Ross

UNITED STATES PATENT OFFICE.

BERNHARD E. LEHMAN AND ROBERT ROSS, OF BETHLEHEM, PA.

IMPROVEMENT IN GAGE-COCKS.

Specification forming part of Letters Patent No. 115,746, dated June 6, 1871.

To all whom it may concern:

Be it known that we, BERNHARD E. LEHMAN and ROBERT ROSS, of Bethlehem, in the county of Northampton and State of Pennsylvania, have invented a new Improvement in Gage-Cocks; and we 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.

Nature and Object of the Invention.

Our invention consists in certain improvements in gage-cocks, too fully described hereafter to need preliminary explanation, whereby the expense of manufacturing and repairing the cocks is reduced and the adjustment of the parts is more readily effected than in those of the usual construction.

Description of the Accompanying Drawing.

Figure 1 is a longitudinal section of our improved gage-cock; Fig. 2, an end view of part of the cock; and Fig. 3, an end view of another part of the cock.

General Description.

The tubular stem A screws into the head of the boiler, as usual, and has at its front end a projection, G, the face of which is flattened to form a seat for a packing, D, which closes the mouth of the central steam orifice *a* in the stem. The packing D fits and is adjustable in a socket in a lever, consisting of a block, E, and a threaded stem, C, having a weight at its outer end and screwing into the block, and bearing with its inner end against the adjacent end of the packing D. A flat projection, J, on the block E, extends between hooked lugs F F on the stem A, and has, at the opposite sides, pins *d d*, which bear against the inner edges of the lugs, as shown in the drawing. As the packing wears away it is forced out of the socket by turning the stem C of the lever, the latter affording a ready means of effecting

this result in place of the set-screws (and other devices requiring special instruments to adjust them) commonly used.

By placing the lever directly on a line with the steam-passage in the stem and with its fulcrum above the passage, as described, the desired pressure can be obtained without employing an excessive mass of material as a weight to maintain the packing against its seat, while the simple arrangement of lugs and pins described permits the lever to be quickly and entirely removed, to replace the packing or clear the opening *a* of obstructions. By this arrangement, also, the necessity of employing springs, which are expensive, unreliable in their action, and which prevent free access to the packing and opening, is avoided.

It will be seen that the different parts of the cock may be cast separately, and connected together without any further fitting than is necessary to insert the packing and form the screw-threads, the expensive fitting and nice adjustment required in cocks of this class constructed in the ordinary manner being avoided.

Claims.

1. A gage-cock, in which the orifice *a*, for the escape of steam, is closed by an elastic pad, D, fitted to a weighted lever, E, and adjustable by means of the screw-stem C of said lever, as described.

2. The lever, consisting of the weighted screw-stem C, block E, projection, J, and pins *d d*, in combination with the stem A and its hooked lugs F F, as and for the purpose specified.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

B. E. LEHMAN.
ROBERT ROSS.

Witnesses:

W. M. WENDELL,
FRANK HAMMANN.