

D. H. SEAMON.
Variable Exhaust-Valves.

No. 148,763.

Patented March 17, 1874.

Fig. 1.

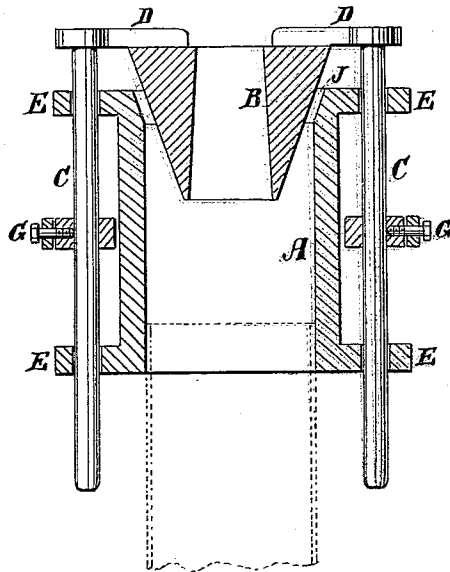
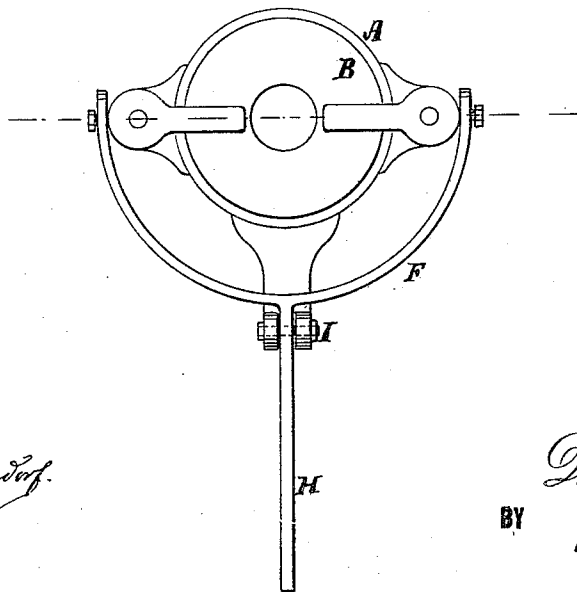


Fig. 2.



WITNESSES:

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IMPROVEMENT IN VARIABLE EXHAUST-VALVES.

Specification forming part of Letters Patent No. **148,763**, dated March 17, 1874; application filed January 5, 1874.

To all whom it may concern:

Be it known that I, DAVID H. SEAMON, of New London, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Variable Exhaust-Valves, of which the following is a specification:

The invention will first be fully described, and then pointed out in the claim.

In the drawing, Figure 1 is a vertical section of Fig. 2, taken on the line *xx*; and Fig. 2 is a top view.

Similar letters of reference indicate corresponding parts.

A is the tube, the interior opening of which is designed to be equal to the diameter of the exhaust-nozzle, as seen in the drawing, where the latter is represented in dotted lines. B is the valve, the seat of which is on the upper end of the tube A. This valve is in the form of a hollow truncated cone reversed. C C are guide-rods, rigidly connected with the valve by means of arms D D. These rods pass through the ears E of the tube, and are connected with the semicircle F at the points G G, the semicircle being on the end of the lever H, whose fulcrum is at I, on an arm which projects from the tube A. This lever extends back to the engine-room, so that the valve

may be operated by the engineer or fireman, as occasion may require.

For producing what is known as a "sharp" exhaust of steam into the chimney, the valve is kept closed, so that all the steam passes through the valve. For a less sharp exhaust, the valve is raised so as to make an annular opening, J, between it and the seat, as seen in the drawing.

By raising the valve in this manner, the annular opening is graduated in size to suit the exigencies of the case, the lever being arranged so that the valve may be set and held in any desired position.

This is a very cheap and simple arrangement for producing a variable exhaust—very durable and very efficient.

This valve and tube-seat is preferably made round; but it may be made square or in any other suitable form.

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

The combination, with valve B D C, of the lever H, provided with half-circle F, and fulcrumed at I, as and for the purpose specified.

Witnesses: DAVID H. SEAMON.

HIRAM WILLEY,
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