W. H. Hull.

Steam Valve.

No. 93,204. Patented Aug. 3, 1869.

Fig. 1

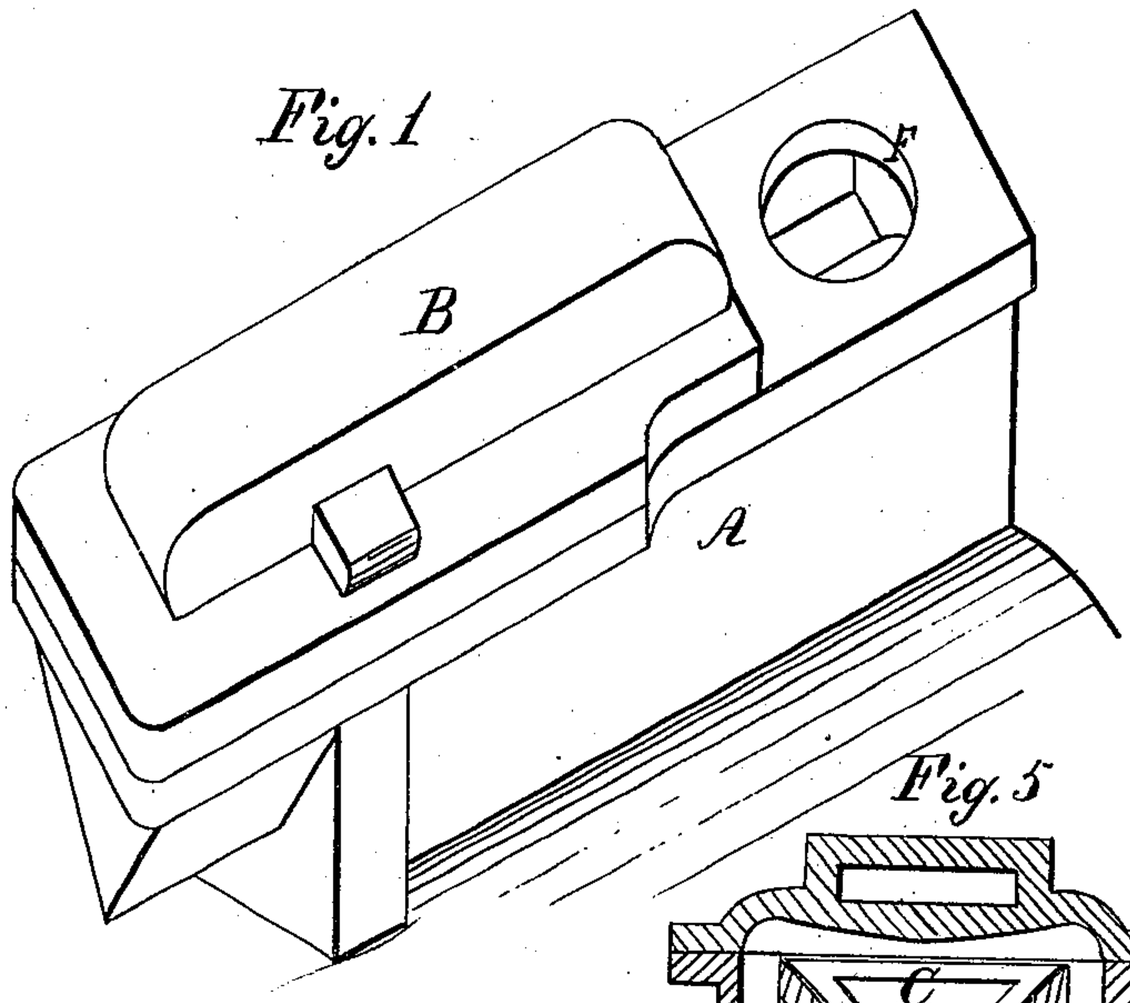


Fig. 5

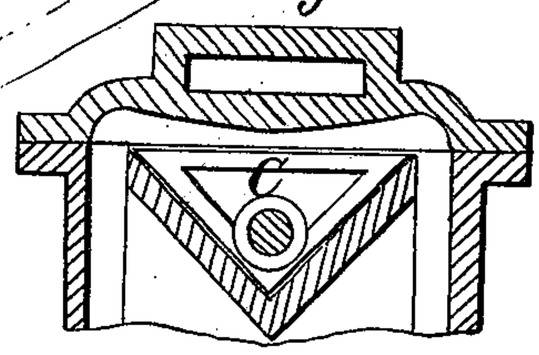


Fig. 2

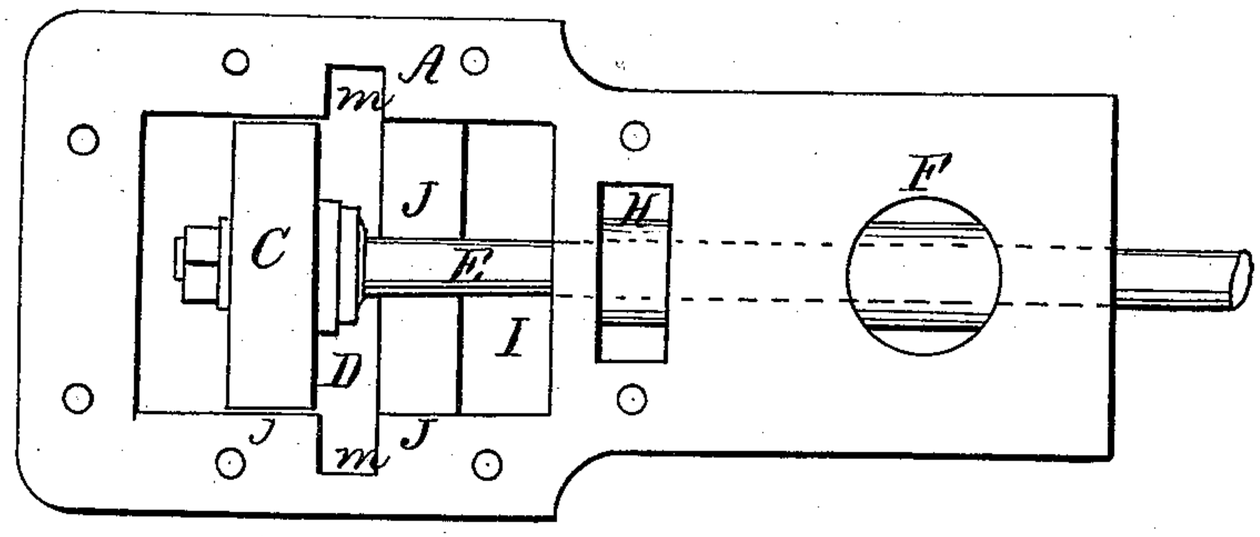


Fig. 3

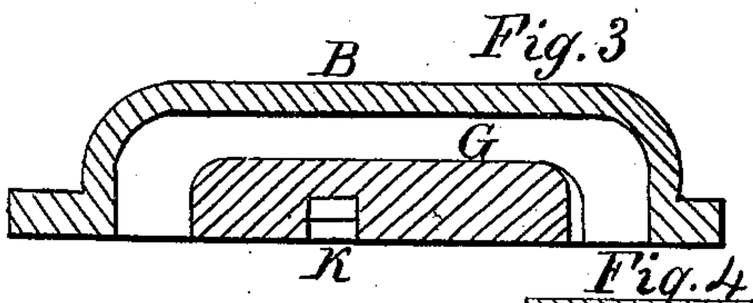
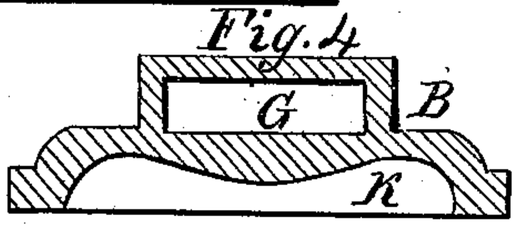


Fig. 4



Witnesses
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W. H. HULL, OF WARREN, OHIO.

Letters Patent No. 93,204, *dated August* 3, 1869.

IMPROVEMENT IN STEAM-VALVE DEVICES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, W. H. HULL, of Warren, in the county of Trumbull, and State of Ohio, have invented a new and useful Improvement in Steam-Engines; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in steam-chests and valves for steam-engines, and consists in the construction and arrangement of parts, as hereinafter described.

In the accompanying drawings—

Figure 1 is a perspective view of the chest, as it appears on the cylinder of the engine.

Figure 2 is a view of the top of the chest, showing the top of the valve, and the valve-rod, the cap of the chest being off.

Figure 3 is a longitudinal section of the cap or top of the chest.

Figure 4 is a cross-section of the cap.

Figure 5 is a cross-section, showing the form of the valve on its seat.

Similar letters of reference indicate corresponding parts.

A is the chest, which may be made single or double. In this example of my invention, a single chest for one end of the cylinder is shown.

B is the cap or top of the chest.

C is the valve.

D is the foot to the cylinder.

E is the valve-rod.

The steam is admitted to the chest through the aperture F, which is in communication with the channel G, in the cap B, by means of the aperture H.

As seen in fig. 2, steam is exhausting from the cylinder, through the port D, toward the centre, into the space I, and from the chest.

J represents the seat of the valve.

The valve is V-shaped, as seen in fig. 5, and slides to admit and exhaust steam to and from the cylinder, similar to the ordinary slide-valve.

When the valve covers the port, steam is admitted on to its top side, by means of the channel K, in the cap B, which corresponds in position with the port D.

The steam is admitted to the channel K through the ends of the port *m*. By this arrangement, the valve is balanced, and works perfectly free and easy on its seat.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent—

The steam-chest A, with the cap B, the valve C, and channel *m*, constructed and arranged, substantially as shown and described.

W. H. HULL.

Witnesses:

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