

(No Model.)

L. MAXFIELD.
STEAM CYLINDER COCK.

No. 253,405.

Patented Feb. 7, 1882.

Fig. 1.

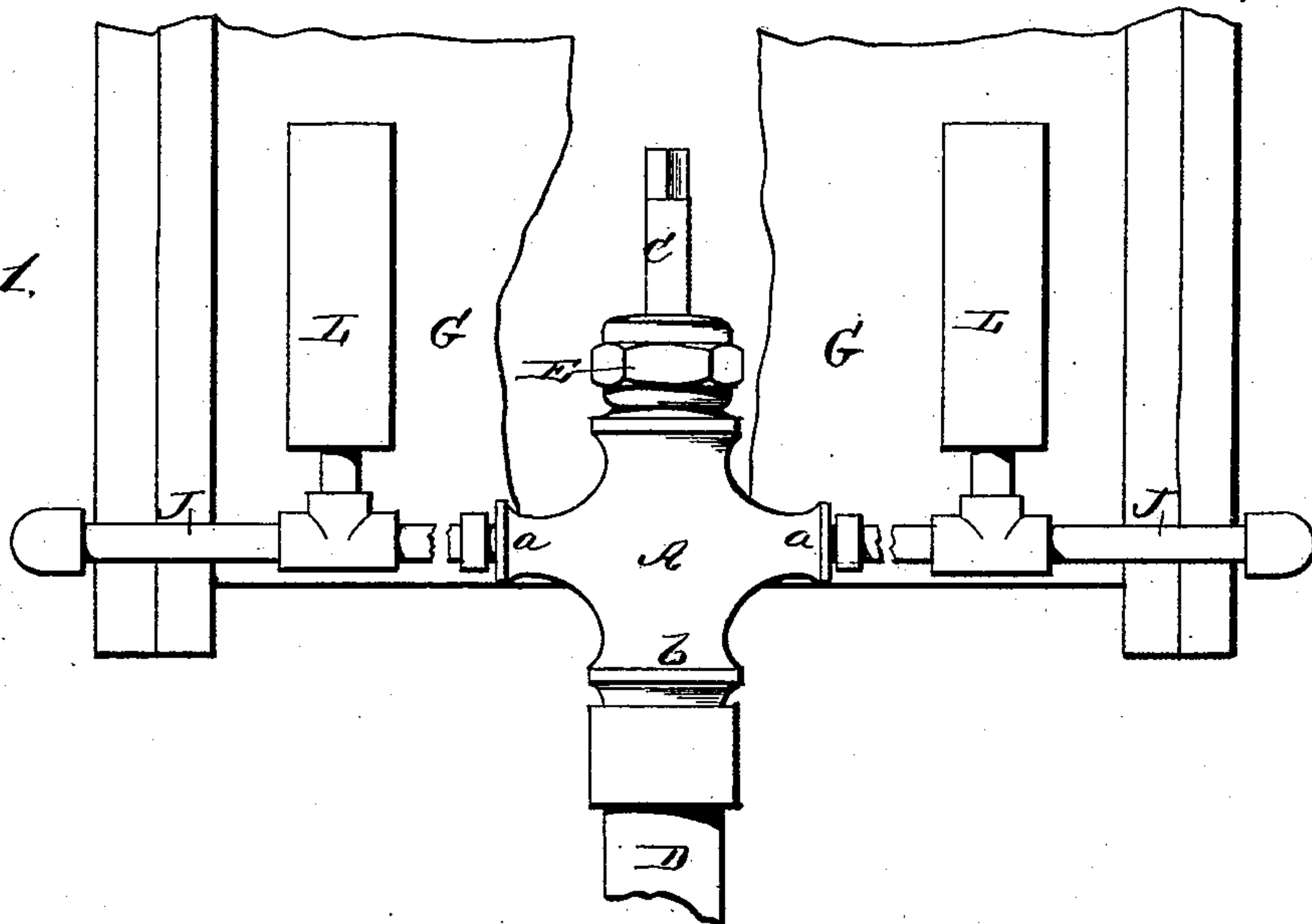
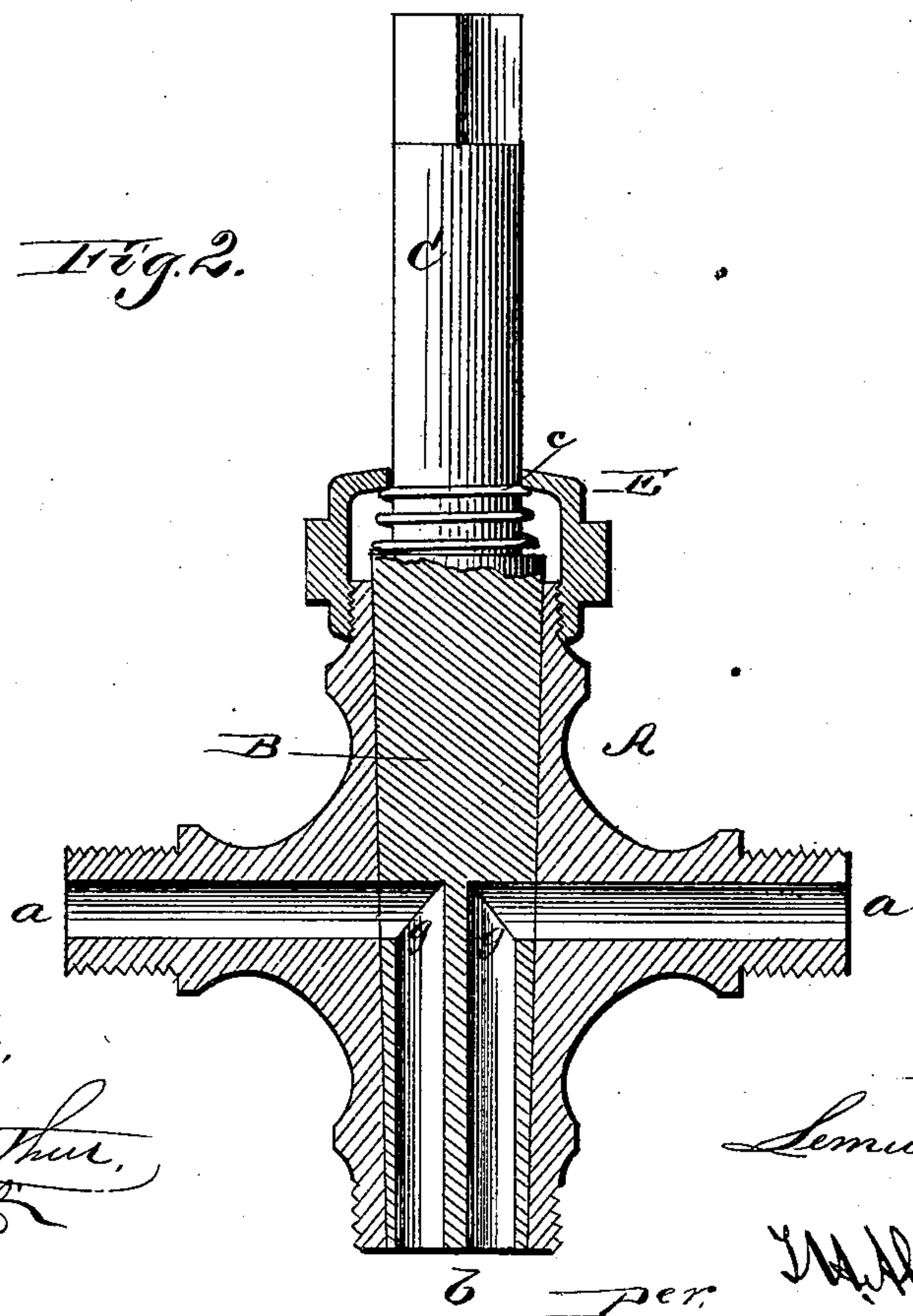


Fig. 2.



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LEMUEL MAXFIELD, OF MOLINE, ILLINOIS.

STEAM-CYLINDER COCK.

SPECIFICATION forming part of Letters Patent No. 253,405, dated February 7, 1882.

Application filed December 7, 1881. (No model.)

To all whom it may concern:

Be it known that I, LEMUEL MAXFIELD, of Moline, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Steam-Cylinder Cocks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side elevation of the cock applied to the cylinder of a steam-engine, partly broken away. Fig. 2 is a vertical section of the cock.

This invention relates to cocks which are especially designed for steam-engine cylinders, but which may be used for other purposes.

The nature of my invention will be fully understood from the following description and claims and the drawings hereto annexed.

The letter A designates the body of my improved cock, which is constructed with two coinciding inlet-ways, *a a*, and a single outlet-way, *b*, arranged at right angles to the inlet-ways.

B designates the stem or plug of the cock, which is slightly tapered and fitted into a corresponding bore made in the body A. This stem or plug is constructed with an upper extension, C, having a prismatic end to receive a key by which to turn the stem about its longitudinal axis. The stem or plug B has L-shaped openings *g g* through it, which are independent of each other—that is to say, they do not communicate with each other. The horizontal limbs of the openings or passages *g g* are so arranged that when they are in the position indicated in Fig. 2 they will exactly register with the horizontal passages through the two ways *a a*. When the cock-stem is turned one-quarter around the said horizontal limbs will be at right angles to the ways *a a*, and water will not pass through the cock. The longest limbs or passages through the stem B are parallel to the longitudinal axis of this stem and discharge into the pipe D, which may lead to any desired point.

E designates the screw-cap of the cock, and *c* a helical spring for keeping the stem down in its seat.

The drawing Fig. 1 represents one application of my newly-invented cock.

G designates a steam-cylinder, and J J the drip-pipes communicating with the interior thereof through the cylinder-heads, and also communicating with the two ways *a a* of the cock, so that by turning the cock-stem water can be drawn simultaneously from both ends of the cylinder G and discharged through the drip-pipe D. When the steam-cylinder of the engine is very long I shall apply air-chambers L L to the two pipes J J to prevent that snapping noise and shock occasioned by the condensing of the steam.

A cock thus constructed answers the purpose of two independent cocks for the purpose described, and it will make no noise while using it. A single quarter-turn of the stem opens or closes both connections with the cylinder at the same time.

What I claim as new is—

1. The combination, with the steam-cylinder, of the drip-pipes J J, the two-way cock constructed with independent passages, the drip or discharge pipe D, and the air-chambers applied to pipes J J, substantially as described.

2. The combination, in a steam-cylinder cock, of the body A, having four limbs, the tapered plug B, fitted into two of these limbs, the independent L-shaped passages *g g*, and the spring *c*, substantially as described.

3. The combination of the body A, the tapered plug B, fitted into the body, the independent L-shaped passages *g g* through the plug, the pipe D, and the pipes J, communicating with the ends of the steam-cylinder.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

LEMUEL MAXFIELD.

Witnesses:

WILLIAM G. MORRIS,
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