

(No Model.)

D. HOGAN.
BALANCED VALVE.

No. 259,392.

Patented June 13, 1882.

Fig. 1.

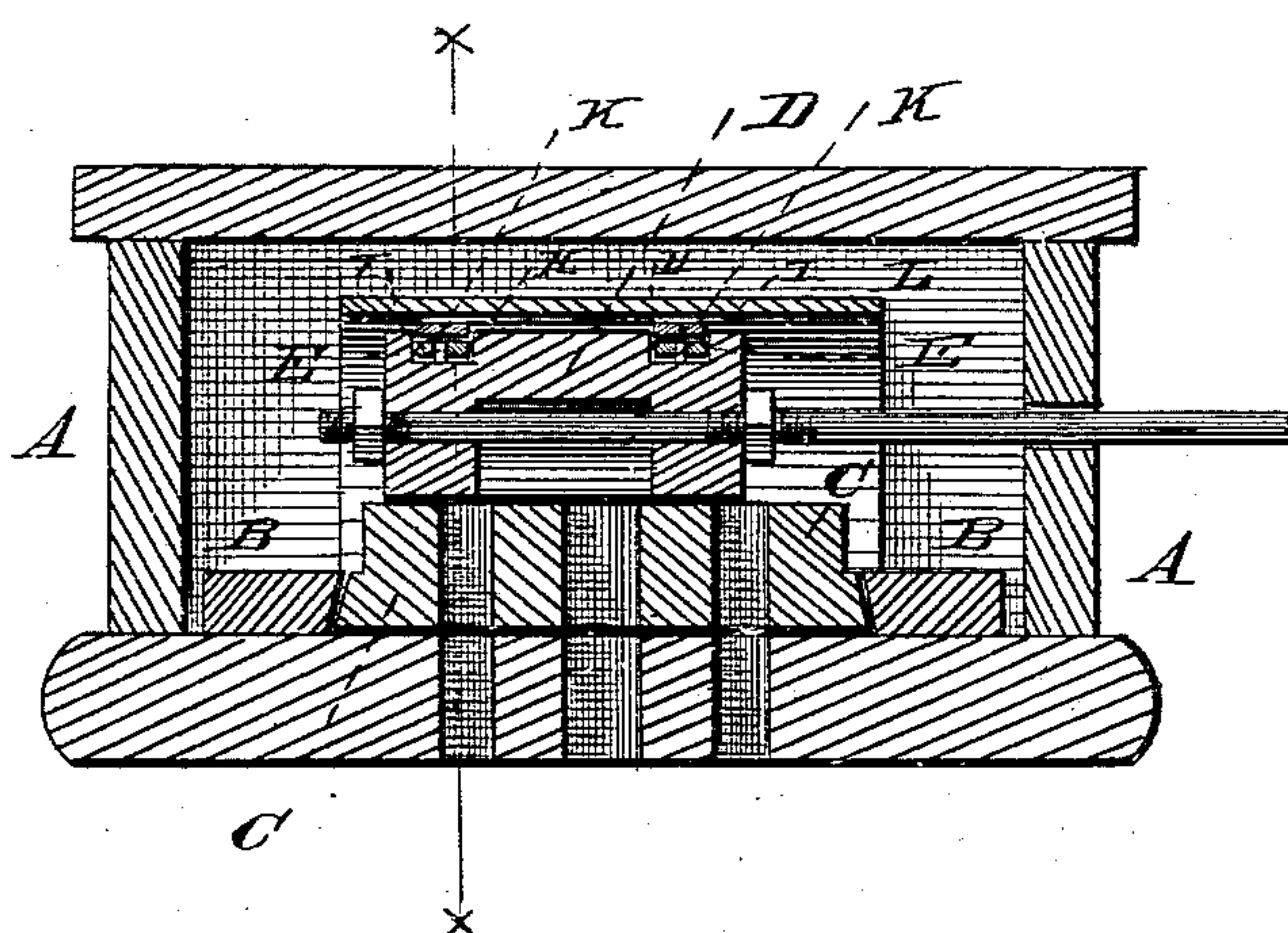


Fig. 2.

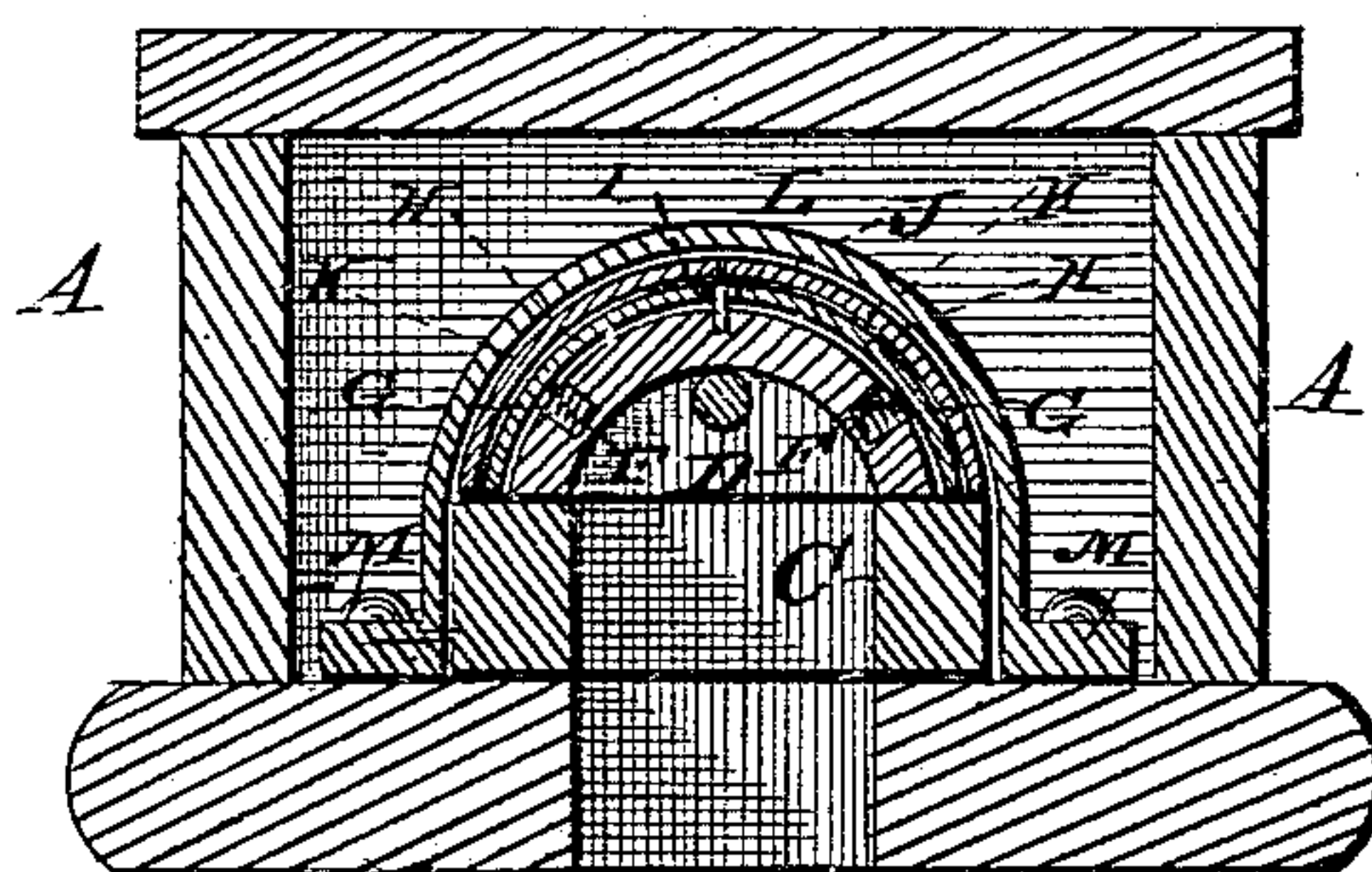
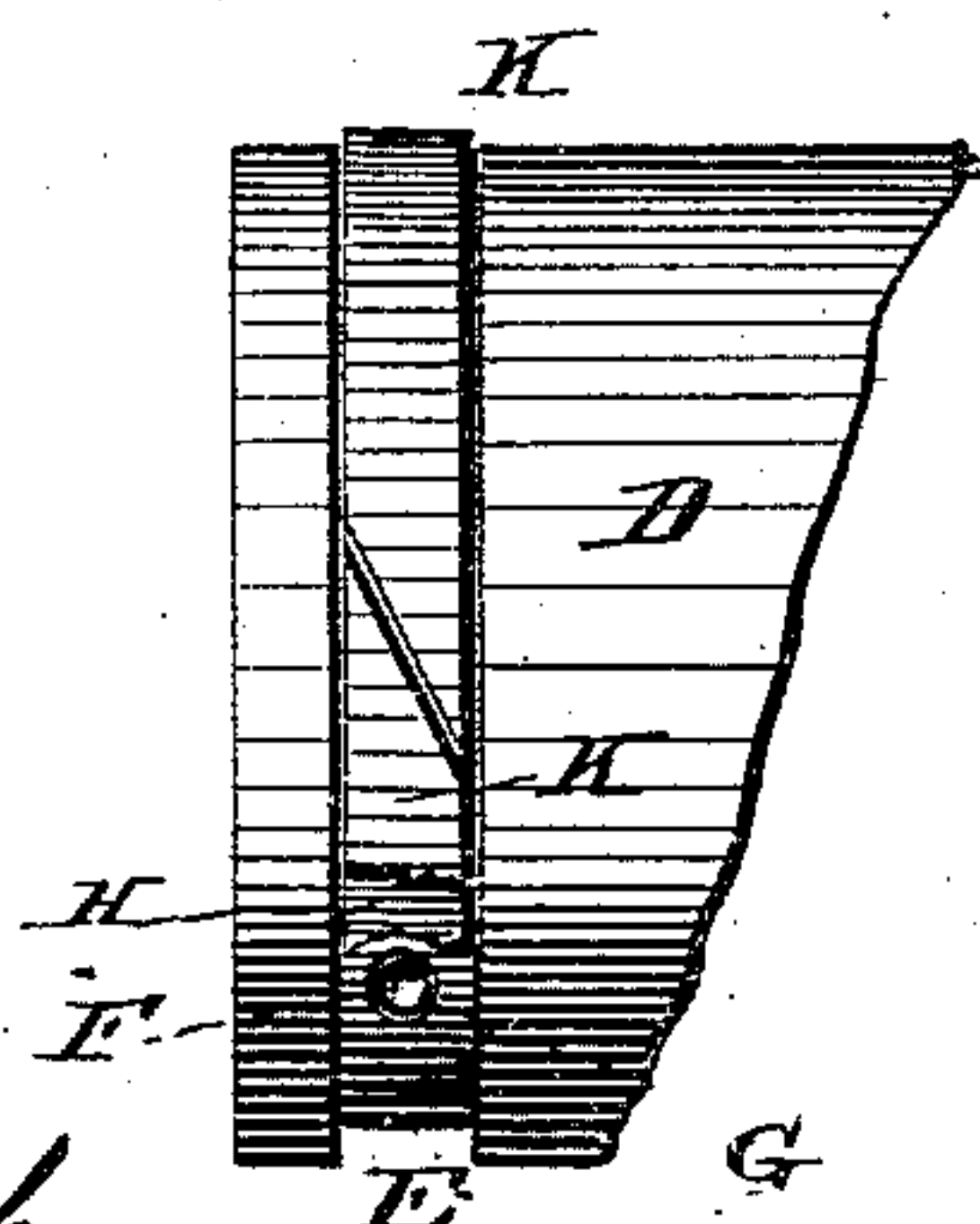


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DANIEL HOGAN, OF TOMLINSON, ARKANSAS.

BALANCED VALVE.

SPECIFICATION forming part of Letters Patent No. 259,392, dated June 13, 1882.

Application filed March 25, 1882. (No model.)

To all whom it may concern:

Be it known that I, DANIEL HOGAN, of Tomlinson, in the county of Scott and State of Arkansas, have invented certain new and useful
5 Improvements in Balanced Valves; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same,
10 reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a longitudinal sectional view. Fig. 2 is a vertical transverse sectional view on the line *x x*, and Fig. 3 is a detail view.

15 Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to steam-valves; and it consists in certain improvements in the construction of the same, which will be hereinafter fully described, and particularly pointed out in the claims.

20 In the drawings hereto annexed, A represents the valve-box or steam-chest, the bottom of which is provided with transverse cleats B B, beveled or dovetailed upon their inner adjoining sides.

25 C is the valve-seat, the sides of which are beveled or dovetailed, so that it may be slid in between the guides or cleats B, which serve to hold it in its proper position. By this arrangement it will be seen that the valve-seat when worn may be readily removed and replaced by a new one by simply removing one
30 side of the steam-chest to render it accessible.

35 D is the valve, which is arched or semi-cylindrical in shape. It is provided near its ends with grooves E E, from which openings or recesses F F extend in a downward direction.

40 G G are springs fitted in said recesses and forcing in an outward direction the packing-strips H H, placed in said grooves. The latter are also provided with centrally-located outward-projecting studs I, fitting in perforations J in the packing-strips H, which are
45 thereby retained in position.

Additional packing-strips, K, are placed over the strips H, two such strips, K, being placed over each strip H, as shown, their adjoining ends being cut off diagonally, so as to form
50 tight and well-fitting joints.

L is a cap or shell, open at the ends, which is placed over the valve and seat, and fitting closely over the valve, the packing of which bears against the under side of said shell. The
55 said shell may be provided with feet or brackets M to receive screws by which it is secured to the bottom of the steam-chest; or said brackets may be made to extend under the sides of the steam-chest; or the shell or cap
60 may be secured in position in any other suitable manner.

The valve and seat may be made of glass, metal, or any other suitable material, and of
65 any desired construction.

The shell or cap L serves to keep the valve-seat in position and to keep the pressure off the valve, the packing-strips, arranged as described, forming a tight joint, which prevents
70 the steam from pressing upon the valve.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the steam-chest having transverse dovetailed cleats B, of the
75 removable valve-seat C, having beveled sides, as set forth.

2. The combination of the steam-chest having dovetailed cleats B, the removable valve-seat C, the valve D, the shell or cap L, and
80 suitable packing interposed between said valve and shell, as and for the purpose set forth.

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

DANIEL HOGAN.

Witnesses:

JOSEPH CALE BELL,
JOSEPH HARRISON BROWN.