(Model.)

T. S. HEWITT.

VALVE FOR STEAM RADIATORS.

No. 311,657. Patented Feb. 3, 1885.

Fig: 1.

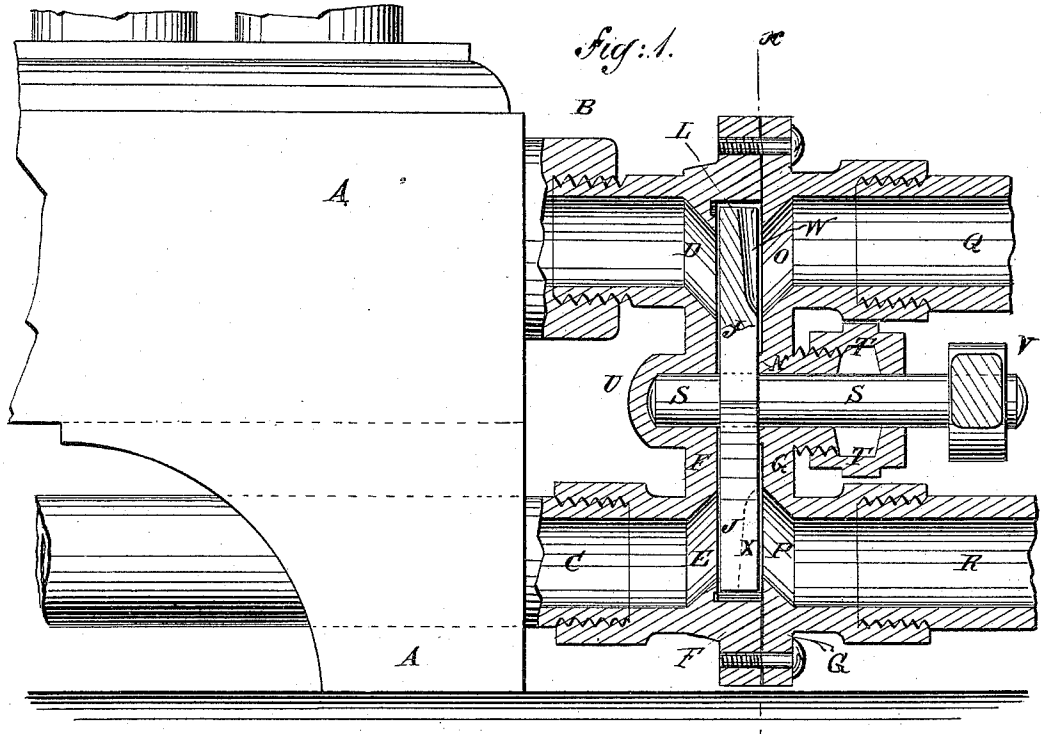


Fig: 2.

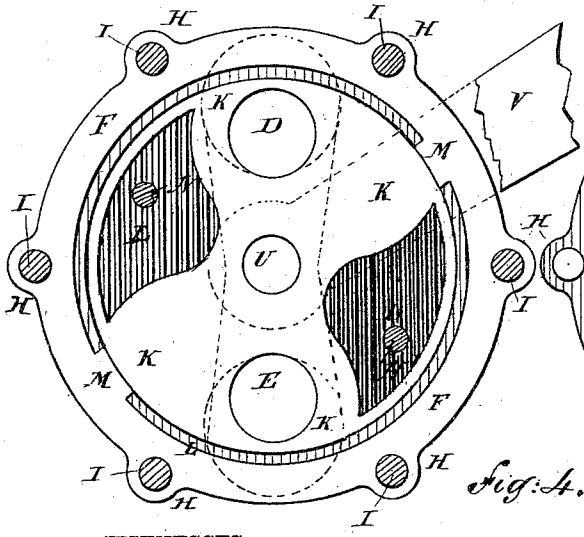


Fig: 3.

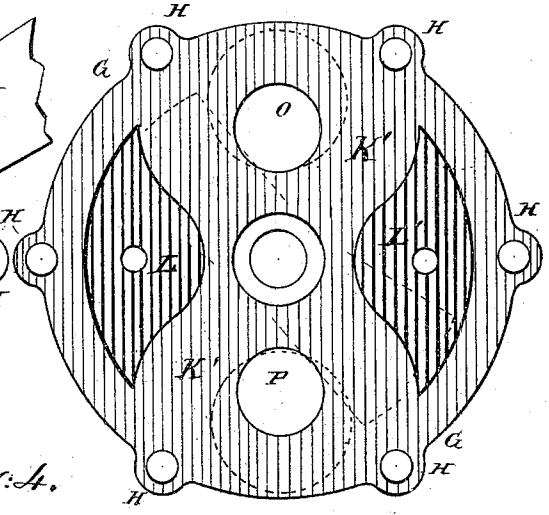
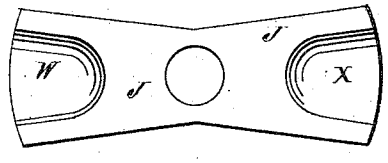


Fig: 4.



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VALVE FOR STEAM-RADIATORS.

SPECIFICATION forming part of Letters Patent No. 311,657, dated February 3, 1885.

Application filed April 10, 1884. (Model.)

To all whom it may concern:

Be it known that I, THOMAS S. HEWITT, of the city, county, and State of New York, have invented a new and useful Improvement in Valves for Steam-Radiators and other Similar Uses, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a sectional side elevation of my improvement shown as applied to a steam-radiator. Fig. 2 is a sectional elevation of the same, taken through the line *x x*, Fig. 1, and looking to the left, the valve being removed; and Fig. 3 is a sectional elevation of the same, taken through the line *x x*, Fig. 1, and looking to the right. Fig. 4 is a plan view of the valve.

The object of this invention is to provide valves for steam-radiators and other similar uses, constructed in such a manner that the inlet and outlet openings can be opened or closed by a single movement, and that a small quantity of steam can pass continuously from the inlet-pipe to the outlet-pipe when the valve is closed.

The invention consists in a valve constructed with two plates having corresponding inlet and outlet openings, a valve-seat, spaces at the sides and ends of the valve-seat, and corresponding ribs, and provided with a valve-plug having recessed ends, and operated by a stem and handle, as will be hereinafter fully described.

A represents the base of a radiator, which is provided with an inlet-opening, B, and an outlet opening or pipe, C, which are respectively connected with the inlet and outlet openings D E of the inner plate, F, of the valve-shell. The inner and outer plates, F G, of the valve-shell have perforated lugs H on their outer edges to receive the bolts I, by means of which the said plates are fastened together. The plates F G are further secured together by bolts or screws N N′, which also serve as stops to limit the movement of the valve and prevent the same from being turned in the wrong direction. The plate F is cored out to receive the valve-plug J, and has a valve-seat, K, formed in it at a little higher level than the remaining parts of the plate, so as to form spaces L.

Upon the inner side of the rim of the plate F, in such positions as to be directly opposite the ends of the valve-plug J when the valve is open, are formed ribs M, for the ends of the valve-plug J to abut against. The plate G is provided with a valve-seat, K′, and spaces L′, corresponding to the seat K and spaces L of the plate F.

In the plate G, and directly opposite the openings D E of the plate F, are formed openings O P, with which are connected the inlet or live-steam pipe Q and the outlet or exhaust-steam pipe R. The valve-plug J is attached to a stem, S, which passes through a stuffing-box, T, in the center of the plate G, and its inner end fits into a socket, U, in the center of the plate F.

To the outer end of the stem S is attached a handle, V, for convenience in turning the stem S and plug J, to open and close the valve.

The valve-plug J is made a little shorter than the diameter of the space within the rim of the plate F, so that when the valve is open the ends of the said valve-plug will abut against the ribs M, and when opened a space will be left between it and the rim of the said plate.

In the outer sides of the end parts of the valve-plug J are formed recesses W X, as shown in Figs. 1 and 4, so that when the valve is closed a small quantity of live steam from the pipe Q can pass continuously through the opening O and recess W into the space L, and can pass thence through the recess X and opening P into the exhaust-pipe R to keep up a circulation.

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

1. A valve constructed substantially as herein shown and described, and consisting of the plates F G, having openings D E and O P, valve-seats K K′, spaces L L′, and ribs M, the valve-plug J, having recesses W X, and the stem and handle S V, as set forth.

2. In a valve, the combination, with the plates F G, having opposite inlet and exhaust openings D E and O P and valve-seats K K′,

of the valve-plug J and the stem and handle S V, substantially as herein shown and described, whereby the inlet and outlet openings can both be closed or opened by a single movement, as set forth.

3. In a valve, the combination, with the plates F G, having spaces L L′, and ribs M, of the valve-plug J, having recesses W X, and the stem and handle S V, substantially as herein shown and described, whereby a small quantity of steam, when the valve is closed, can pass continuously from the live-steam pipe to the exhaust-pipe to keep up the circulation, as set forth.

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Witnesses:
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