(No Model.)

E. LUNKENHEIMER.

STRAIGHT WAY VALVE.

No. 457,128. Patented Aug. 4, 1891.

Fig. 1.

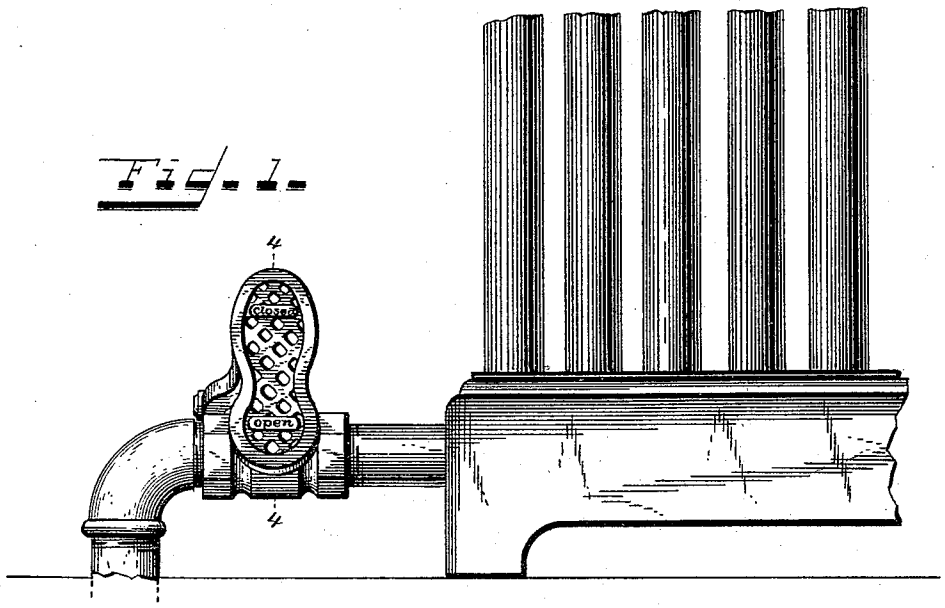


Fig. 2.

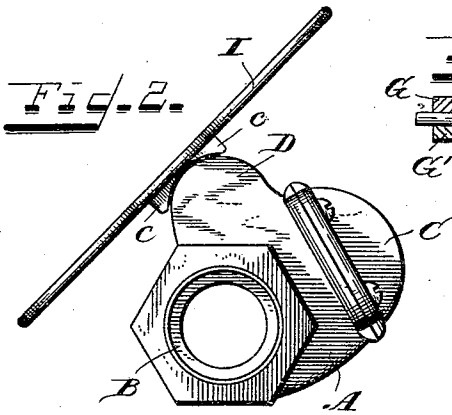


Fig. 5.

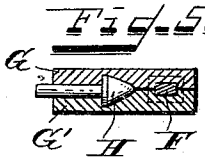


Fig. 3.

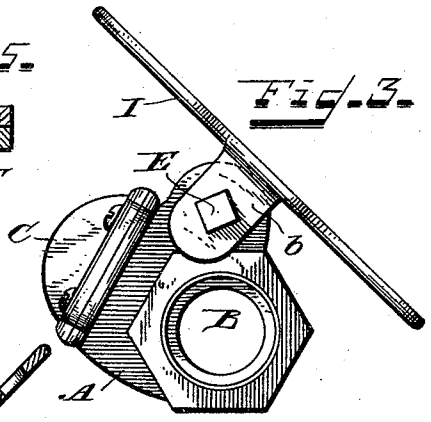


Fig. 6.

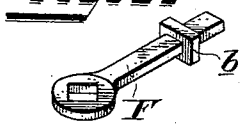
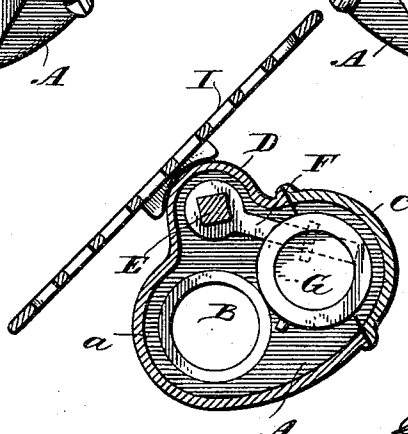


Fig. 4.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDMUND LUNKENHEIMER, OF CINCINNATI, OHIO, ASSIGNOR TO THE LUNKENHEIMER BRASS MANUFACTURING COMPANY, OF SAME PLACE.

STRAIGHT-WAY VALVE.

SPECIFICATION forming part of Letters Patent No. 457,128, dated August 4, 1891.

Application filed April 18, 1891. Serial No. 389,490. (No model.)

To all whom it may concern:

Be it known that I, EDMUND LUNKENHEIMER, a citizen of the United States, residing at Cincinnati, in the county of Hamilton and State of Ohio, have invented certain new and useful Improvements in Straight-Way Valves, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates, first, to the construction of the valve for the general purposes of straight-way valves, and, second, to its construction with special reference to its employment as a pedal-valve for steam-radiators. Its novelty will be hereinafter set forth, and specifically pointed out in the claims.

In the accompanying drawings, Figure 1 is a front elevation of my improved valve applied as a pedal-valve to the supply-pipe of a steam-radiator. Fig. 2 is a side elevation of the valve, looking to the left in Fig. 1. Fig. 3 is a corresponding view, looking to the right. Fig. 4 is a cross-section on the line 4 4 of Fig. 1, looking to the left. Fig. 5 is a cross-section of the two valve-disks, showing the interposed wedging device and carrier. Fig. 6 is a perspective view of the carrier for the valve-disks.

The same letters of reference are used to indicate identical parts in all the figures.

The casing of the valve is composed of a shell A, having the integral pipe connections B B in line with each other on its opposite sides, and a cap C bolted to it to close its open end, through which the valve-disks are inserted. In a tubular neck D of the casing is journaled a rocking spindle E, preferably rectangular in cross-section, and upon which is fitted the carriers F for the two valve-disks G G. As shown in Figs. 4 and 5, the carrier F is rectangular in cross-section and its free end fits in recesses in the inner faces of the disks G G. It is also provided with a collar *b*, which fits in corresponding recesses in the disks to prevent movement of them longitudinally of the carrier. These disks are adapted to be forced against and tightly fit parallel valve-seats at the inner ends of the pipe connections B B. Fitted between the disks in suitable recesses is a wedging device consisting in this instance of a pin H, having a conical or wedge-shaped head at one end near the center of the disks and projecting at its opposite end beyond the peripheries of the disks. When the spindle E is rocked and the disks swung from the open position of the valve (shown in Fig. 4) to a closed position and brought into line with the pipe connections, the projecting end of the pin H will strike the inner surface of the casing at the point *a* and its conical or wedge-shaped head will spread the disks apart and force them against their respective seats.

The spindle E may be rocked by any suitable handle to open and close the valve; but where the valve is to be employed as a pedal or foot valve for steam-radiators I provide a rocking pedal I, which has at one side near its middle a pendent arm *b*, which fits over the projecting end of the spindle E and is provided on its under surface with lugs *c c*, which form a bearing for it upon the exterior surface of the tubular portion D of the valve-shell. If desired, one end of the pedal may, as shown in Fig. 1, bear the word "Open," to indicate that pressure upon that end will open the valve, and the other word "Close" or "Closed," to indicate that pressure upon that end will close the valve.

Having thus fully described my invention, I claim—

1. The combination of the valve-shell A, having the integral pipe connections B B, the rocking spindle E, the two valve-disks G G, operated by the spindle E, and the wedge H, fitted between them and adapted to force them against their seats at the inner ends of the pipe connections when the valve is closed, substantially as described.

2. The combination of the valve-shell A, having the integral pipe connections B B, the rocking spindle E, the pedal H applied thereto, the two valve-disks G G, operated by the spindle E, and the wedge H, fitted between them and adapted to force them against their seats at the inner ends of the pipe connections when the valve is closed, substantially as described.

3. The combination of the valve-shell A, having the integral pipe connections B B, the rocking spindle E, the carrier F, the disks G G,

and the interposed wedge H, substantially as described.

4. The combination of the valve-shell A, having the integral pipe connections B B, the rocking spindle E, the pedal H, resting at its middle upon the surface of the valve-shell, and having the pendent arms *b* fitted upon the spindle E, and the valve-disks G G, operated by the spindle and adapted to fit against seats at the inner ends of the pipe connections.

EDMUND LUNKENHEIMER.

Witnesses:
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