J. F. McELROY, DEC'D.
S. H. McELROY, EXECUTRIX.
TRAIN PIPE END VALVE.
APPLICATION FILED APR. 24, 1909.

1,157,236.

Patented Oct. 19, 1915.

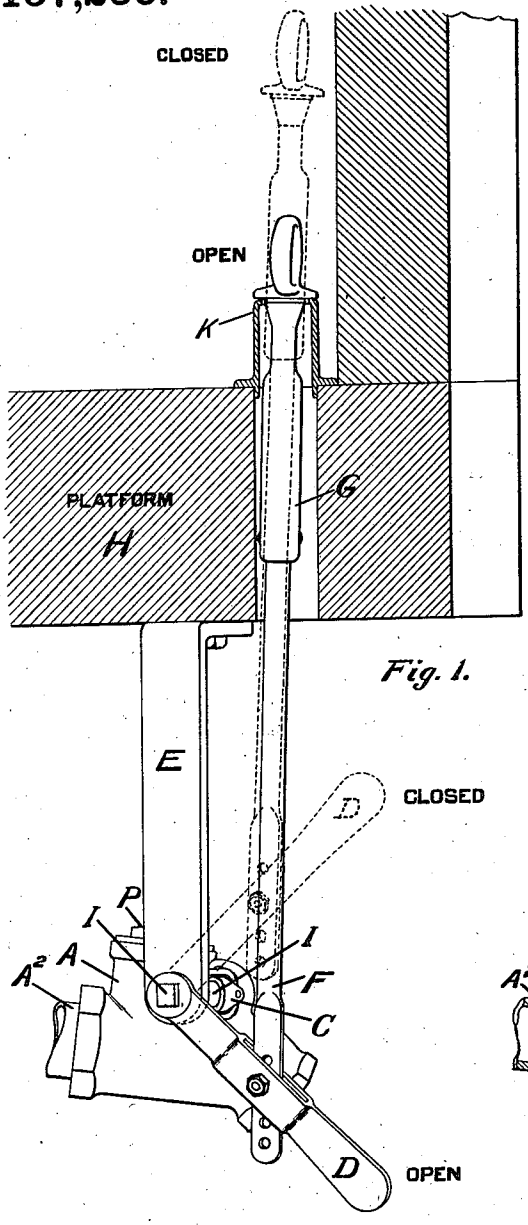


Fig. 1.

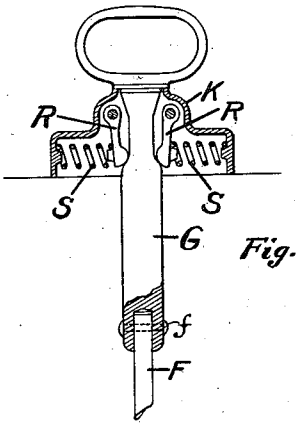


Fig. 3.

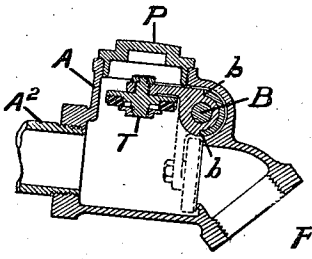


Fig. 2.

Witnesses
M. G. Hart
L. T. Shaw

Inventor
James F. McElroy
by Betts Sheffield Bentley & Betts
Attys.

UNITED STATES PATENT OFFICE.

JAMES F. McELROY, OF ALBANY, NEW YORK; SUSIE HALE McELROY, EXECUTRIX OF SAID JAMES F. McELROY, DECEASED, ASSIGNOR TO CONSOLIDATED CAR-HEATING COMPANY, A CORPORATION OF WEST VIRGINIA.

TRAIN-PIPE END VALVE.

1,157,236. Specification of Letters Patent. Patented Oct. 19, 1915.

Application filed April 24, 1909. Serial No. 492,070.

To all whom it may concern:

Be it known that I, JAMES F. McELROY, a citizen of the United States, and residing at Albany, county of Albany, State of New York, have invented certain new and useful Improvements in Train-Pipe End Valves, of which the following is a full, clear, and exact disclosure.

My invention relates to an improvement in train-pipe end-valves, particularly the operating devices therefor and the form thereof which I now consider the best, is illustrated in the accompanying drawing, wherein—

Figure 1 is a side elevation, partly in section; Fig. 2 is a section of the valve; Fig. 3 is a detail of the upper end of the operating handle.

Referring to Fig. 2, T is the valve, which is of disk form, its open position being shown in full lines and its closed position in dotted lines. This valve is mounted on operating rock shaft B and kept from rotating thereon by means of shoulders *b b*. A is the valve-housing provided with a screw cap P covering an opening through which the valve may be inspected and renewed. The valve casing A is secured to the extremity of the train-pipe A^2.

Referring to Fig. 1, the valve is arranged in the position shown underneath the car platform. The shaft B is prolonged by a stem I, preferably connected to the shaft B by a gimbal joint C. This stem I is journaled in the lower end of a bracket E and is provided with crank arm or lever handle D which may be turned down to the position shown in full lines to open the valve or lifted up to the position shown in dotted lines to close it. There is also connected to that handle D a handle-bar composed of link F adjustably connected to the handle D, as shown, and a second link G jointed to F at *f* and projecting through the car platform where it terminates on the upper side in a loop handle mounted in the housing K. The link G has a contracted neck near its upper end which is engaged by the dogs R R pressed against the neck of the springs S S respectively. The dogs R R serve to practically lock the handle-bar in its lowest or open position by engaging the aforesaid neck and to again lock the handle-bar in its uppermost or closed position by engaging the lower end of the link G where it is pivoted to the link F. By exerting more or less force, however, the handle-bar can be either lifted or depressed in spite of the retaining action aforesaid of the dogs R R.

I do not intend to limit myself to the specific form herein shown, for other forms may be employed within the confines of my invention.

What I claim as new and desire to secure by Letters Patent is:

1. An operating device for a train-pipe end-valve comprising a rock shaft in operative connection with the valve, a crank arm rigidly secured at one end to said rock shaft, and a sectional yielding operating link connected at one end to the other end of said crank arm.

2. An operating device for a train-pipe end-valve comprising a rock shaft in operative connection with the valve, a crank arm rigidly secured at one end to said rock shaft, a sectional yielding operating link connected at one end to the other end of said crank arm, the other end of said link being provided with a handle.

3. An operating device for a train-pipe end-valve, comprising a valve-shaft, a vertically moving handle-bar extending through the car floor and a stop for holding said bar in its depressed position.

4. An operating device for a train-pipe end-valve, comprising a valve-shaft, vertically moving handle-bar therefor extending through the car floor, and stops for holding the bar in both its raised and closed positions.

5. An operating device for a train-pipe end-valve, comprising a horizontal shaft in operative connection with the valve, a bracket suspended from the undersurface of the car floor and in which said shaft is mounted and a vertical operating handle for said shaft extending through the car floor.

6. An operating device for a train pipe end valve comprising a horizontal operating shaft having one end connected to the valve, a bracket for supporting the free end of said operating shaft and a vertically disposed longitudinally movable handle operatively connected to the free end of said shaft.

7. An operating device for a train pipe end valve comprising a horizontal operat-

ing shaft having one end connected to the valve by a universal joint, a bracket for supporting the free end of said operating shaft, and a vertically disposed handle operatively connected to the free end of said shaft.

8. An operating device for train pipe end-valves comprising an operating shaft for the valve, a stem, means for universally connecting said stem to said shaft, a lever carried by said stem, a housing carried by a car platform, a bar slidable through said housing and platform and pivotally connected to said lever, and a stop in said housing for yieldingly engaging said bar.

9. An operating device for a train pipe valve comprising a valve-operating handle bar vertically movable through and operable from the platform of a car, means for operating the valve from below the platform, a pivotal connection between the handle bar and the said means, and automatically acting means carried by the car platform for retaining the device in the position set by either the handle bar or the valve operating means.

10. A train-pipe end-valve provided with a horizontal operating device, two handles connected to the outer end of said device one above and the other below the car platform, and a yielding stop whereby the valve may be operated by either handle and held in the position to which it is thrown by the handle that is operated.

11. A train pipe end-valve, combined with an operating handle below the car platform, a horizontal connection between said handle and the valve, a second handle above the car platform, and a yielding stop operable by both handles.

In witness whereof I have hereunto set my hand before two subscribing witnesses.

JAMES F. McELROY.

Witnesses:
ERNEST D. JANSEN,
BEULAH CARLE.