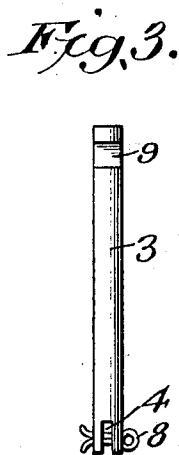
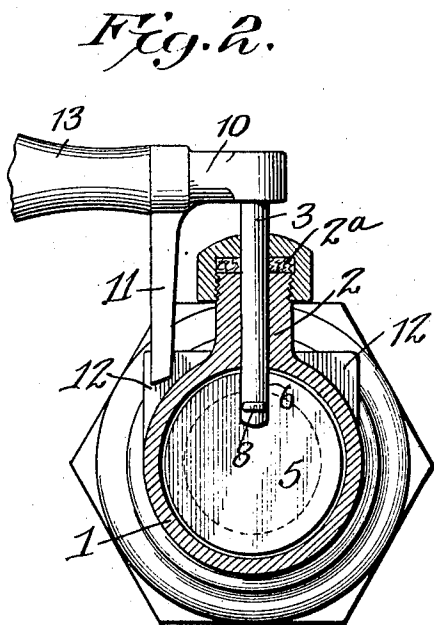
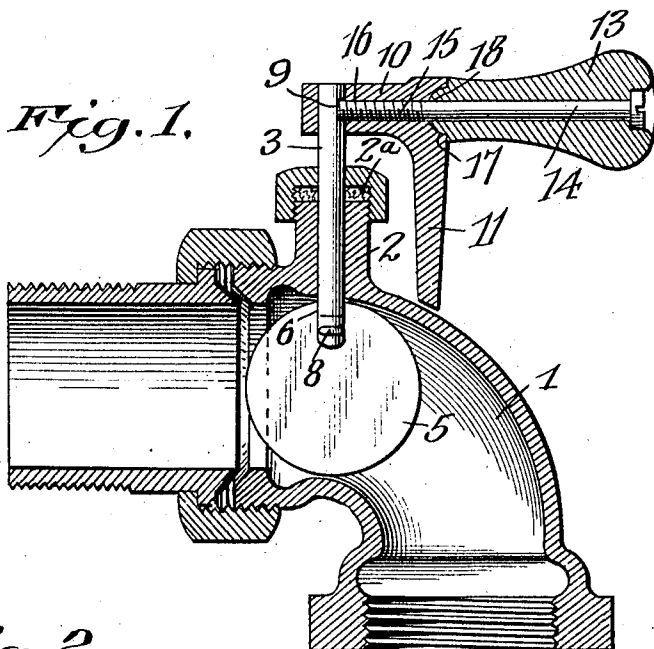


J. P. MURPHY.
HOT WATER RADIATOR VALVE.
APPLICATION FILED MAY 22, 1909.

955,979.

Patented Apr. 26, 1910.



John P. Murphy ^{Inventor}

Witnesses
Stewart Rice.
Dr. L. M. Cathman.

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UNITED STATES PATENT OFFICE.

JOHN P. MURPHY, OF HANNIBAL, MISSOURI.

HOT-WATER-RADIATOR VALVE.

955,979.

Specification of Letters Patent.

Patented Apr. 26, 1910.

Application filed May 22, 1909. Serial No. 497,572.

To all whom it may concern:

Be it known that I, JOHN P. MURPHY, a citizen of the United States, residing at Hannibal, in the county of Marion and State of Missouri, have invented certain new and useful Improvements in Hot-Water-Radiator Valves, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to valves for hot water radiators and other places where loose fitting and quick operating valves may be used, especially as applied upon bends in pipes.

The object of this invention is the production of a valve, which is simple in construction and consists of a comparatively small number of parts.

Another object of this invention is the production of a novel means for connecting the operating lever to the rotatable valve stem.

With these and other objects in view this invention consists of certain novel constructions, combinations and arrangements of parts as will be hereinafter fully described and claimed.

In the drawings: Figure 1 is a longitudinal section of an elbow showing my improved valve applied thereto; Fig. 2 is a transverse section of the same; Fig. 3 is an elevation of the valve-stem.

Referring to the drawings by numerals, 1 designates the casing, or elbow, which is provided with an upwardly-extending projection 2 upon the upper portion thereof.

The valve-stem 3 is provided upon one side and near the upper edge thereof with a notched-portion 9 and a lever-operating member 10 is adapted to fit upon the upper end of the valve-stem 3; said operating-lever 10 is provided with a depending or downwardly-extending portion 11. The casing, or elbow, 1 is provided upon each side of the upwardly-extension 2 with an ear 12, which limits the movement of the operating-lever 10. It will be obvious that when the lever is swung to one side, so as to close the butterfly valve 5, the depending portion 11 will engage one of the ears 12, and, therefore, the movement of the butterfly valve

will be limited. A knob 13 is adapted to be secured to the operating-lever 10 to facilitate the operation of said lever and said knob 13 is secured to the operating-lever 10 by means of a bolt-member 14, which is provided with a threaded end 15 adapted to work in the threaded aperture 16, formed in the operating-lever. The threaded aperture 16 is adapted to register with the notch 9 upon the valve-stem 3 and the inner-end of the bolt-member 14 is adapted to engage the notch 9 and firmly hold the valve-stem 3 from independent movement. The lever 10 is provided with a socket portion 17 adapted to receive a bulged portion 18 upon the inner end of the knob 13. It will be obvious that by having such a structure the knob 13 will snugly fit, or engage, the lever member 10 and the knob will be held from any lateral movement. It will also be obvious that the valve-stem will be firmly held in engagement with the operating-lever 10 through the medium of the bolt-member 14, which engages the notch 9 and the valve will not be allowed to have independent rotary movement and the same will be fixedly secured to the operating-lever 10.

What I claim is:

In a device of the class described the combination with a valve casing, of a valve-stem provided with a notch formed near the upper end and upon one side thereof, an operating handle engaging said end and provided with a depending portion, said operating handle provided with a threaded aperture registering with said notch, a knob, a bolt passing through said knob and working in said threaded aperture and engaging said notch for firmly securing said operating handle to said valve-stem and preventing the independent rotation of the same, and means formed upon said valve casing for limiting the movement of said operating handle.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

JOHN P. MURPHY.

Witnesses:

JOHN G. CABLE,
LEWIS O'CONNOR.