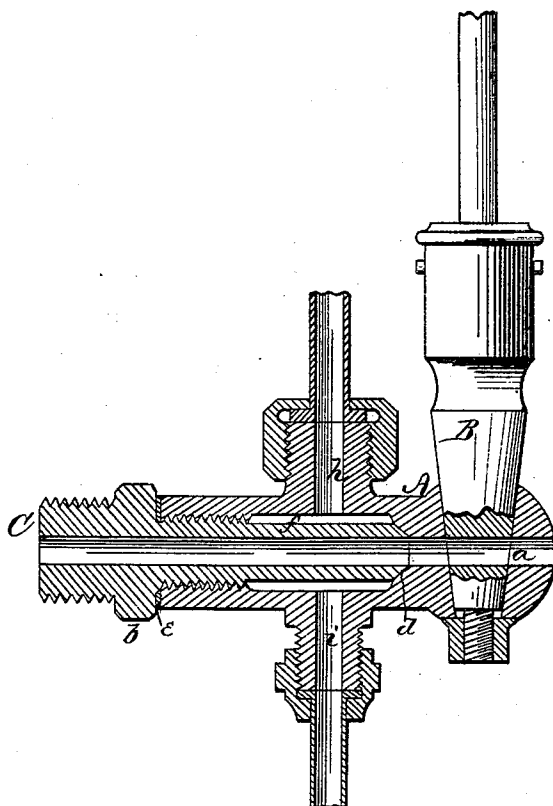


F. A. CASEY.

Pet-Cock for Locomotives.

No. 167,302.

Patented Aug. 31, 1875.



WITNESSES

Henry N. Miller
C. L. Everh.

INVENTOR

F. A. Casey,
per
Alexander Mason
ATTORNEYS

UNITED STATES PATENT OFFICE.

FRED A. CASEY, OF ELKHART, INDIANA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO H. BEARUP, OF SAME PLACE.

IMPROVEMENT IN PET-COCKS FOR LOCOMOTIVES.

Specification forming part of Letters Patent No. **167,302**, dated August 31, 1875; application filed
February 24, 1875.

To all whom it may concern:

Be it known that I, FRED A. CASEY, of Elkhart, in the county of Elkhart and in the State of Indiana, have invented certain new and useful Improvements in Pet-Cocks; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon, making a part of this specification.

My invention relates to the ordinary pet-cocks used on locomotive-pumps or other machinery; and it consists in the construction and arrangement of an attachment combined with a pet-cock, to prevent the same from freezing, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, which represents a longitudinal section of my improved pet-cock.

A represents the tube or barrel of the pet-cock, through the outer end of which passes the plug or key B, constructed in the ordinary manner, for opening and shutting the water-channel *a*. In the other end of the barrel A is screwed a movable plug, C, which is made hollow, and provided with a circumferential flange, *b*. This flange is to abut against the end of the barrel, and packing *e* placed between them, so as to make a steam-tight joint at that point. The outer end of the hollow plug C screws into the pump-chamber, for

holding the pet-cock in position. The inner end of the hollow plug forms a steam-tight joint, *d*, by forming the end tapering, and at the same time forming the continuous water-chamber *a*. Around the hollow plug C in the barrel A is formed an annular space, *f*, provided with inlet *h* and outlet *i*. The steam is admitted into the annular space *f* through the inlet *h* around the water-channel *a* and out of the waste-opening *i* into the atmosphere.

By the steam surrounding the hollow plug C and water-channel *a* the pet-cock is prevented from freezing.

This device can be used both summer and winter—for summer, by simply opening or breaking the joint at *d*, and closing the openings *a* and *i*, compelling the water to pass through the openings *d* and *h* to the boiler, for the use of the engineer in wetting his coal and trying the condition of his pumps.

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

The combination, with the barrel A and plug or key B of a pet-cock, of the hollow plug C, forming steam-tight joints at *e d*, the annular chamber *f*, inlet *h*, and outlet *i*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 13th day of February, 1875.

FRED A. CASEY.

Witnesses:

CHAS W. FISH,
CHAS. H. LEONARD.