Feb. 19, 1924. 1,483,939

A. C. JAEGER

URINAL FLUSH

Filed Jan. 11, 1921

Fig. 1.

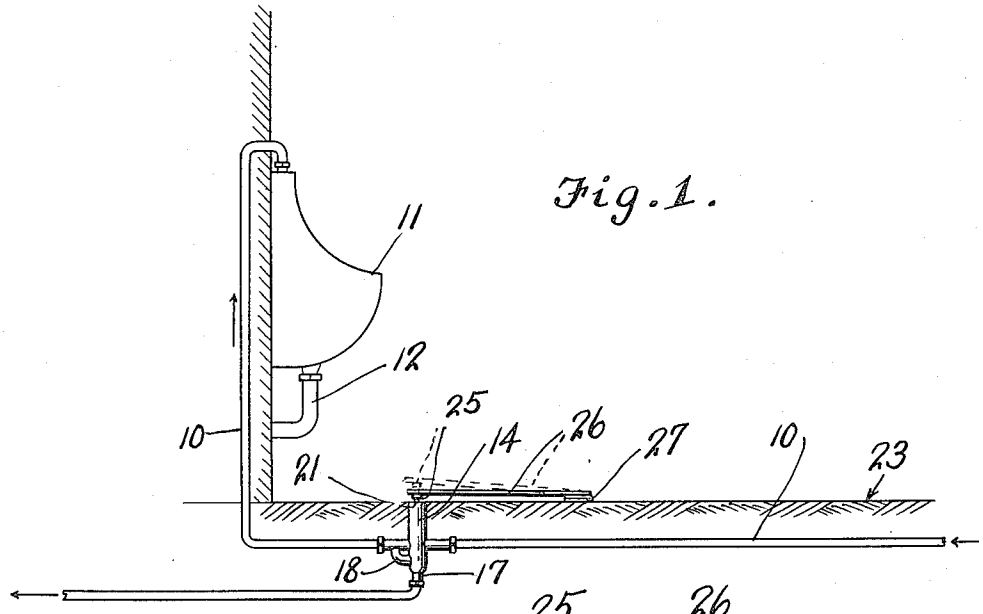
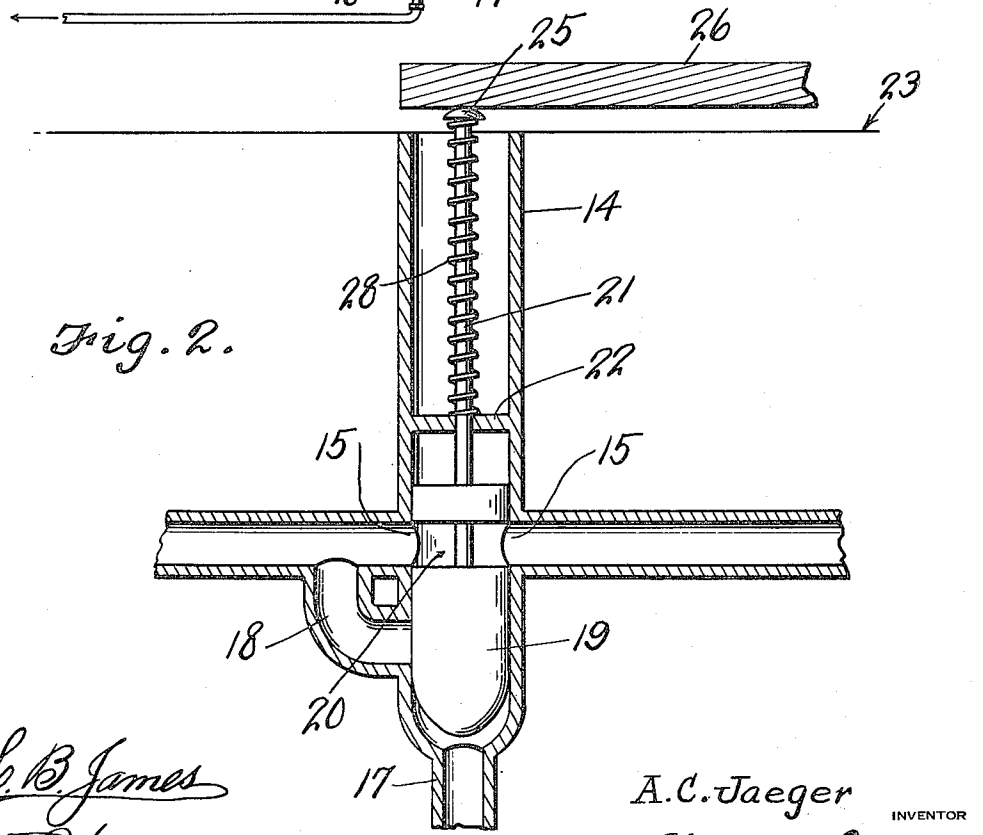


Fig. 2.



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WITNESS:

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UNITED STATES PATENT OFFICE.

ANTHONY C. JAEGER, OF ST. LOUIS, MISSOURI.

URINAL FLUSH.

Application filed January 11, 1921. Serial No. 436,470.

To all whom it may concern:

Be it known that I, ANTHONY C. JAEGER, a citizen of the United States, residing at St. Louis, in the county of St. Louis City and State of Missouri, have invented new and useful Improvements in Urinal Flushes, of which the following is a specification.

This invention relates to valves and has for an object the provision of a valve especially adapted for use in lavatories in connection with the flushing systems of urinals, whereby the weight of a person standing before the urinal will open the valve, which will be automatically closed when the weight is relieved, thus providing for continuously flushing the urinal during the use of the latter.

Another object is the provision of a flushing system for urinals, having an automatically operated valve, in which water between the valve and the urinal will be permitted to drain from the pipe after the valve is closed and thereby prevent freezing.

With the above and other objects in view, the invention further includes the following novel features and details of construction, to be hereinafter more fully described, illustrated in the accompanying drawings and pointed out in the appended claim.

In the drawings:—

Figure 1 is a sectional elevation illustrating the application of the invention.

Figure 2 is an enlarged vertical longitudinal sectional view through the controlling valve and the operating platform, the parts being in the position shown in Figure 1, that is, with the supply pipe open.

Referring specifically to the drawings, wherein like characters of reference denote corresponding parts, the invention which is designed for use in connection with the urinal, includes a supply pipe 10, by means of which water from any suitable source may be supplied to the urinal 11 for the purpose of flushing the same. This pipe 10 is connected to the urinal in the usual or any preferred manner and the latter is equipped with the ordinary discharge pipe 12.

Controlling the pipe 10 is a valve, which comprises an elongated casing 14 provided with diametrically oppositely located openings 15 for connection with the supply pipe. The lower end of the casing 14 is provided with a drain 17. Communicating with the casing 10 between the supply pipe connection and the drain 17, is one end of a bypass pipe 18, the opposite end of this pipe being connected to that portion of the pipe 10 which is located between the valve and the urinal, the purpose being to establish communication between this pipe and the drain 17.

Operating within the casing 14 is a valve member 19 which is provided with an annular passage 20, while extending forward from this member is a stem 21 which operates through a guide 22 provided in the casing 14. The upper end of the stem 21 projects above the floor 23 of the lavatory and resting upon a head 25 provided upon the said stem is the free end of a platform 26. The opposite end of this platform is hingedly secured to the floor 23 as shown at 27. Surrounding the stem 21 and bearing against the head 25 and the guide 22 is a spring 28, which acts to hold the platform 26 with its free end elevated. When the platform is in this position, the passage 20 of the valve member 19 will be located above the supply pipe 10 so as to cut off communication between the pipe upon the opposite sides of the valve, the guide 22 acting as a stop to limit the upward movement of the guide member 19. This position is shown in Figure 3 of the drawings and it will be noted that with the valve in its raised position, communication between the supply pipe and the drain 17 is established.

A person standing upon the platform 26, will depress the latter until the valve reaches the position shown in Figure 2, whereupon communication will be open through the valve for the purpose of supplying water to the urinal 11, and flushing the same, this action continuing as long as the platform is depressed. As soon as the weight is removed from the platform, the valve will be raised to close the supply pipe and open the by-pass to the drain, so that any water within that portion of the pipe between the valve and the urinal will pass off through the drain 17 and prevent obstruction of this pipe from freezing.

The invention is susceptible of various changes in its form, proportions and minor details of construction and the right is herein reserved to make such changes as properly fall within the scope of the appended claim.

Having described the invention what is claimed is:—

In a flush system, the combination with a

supply pipe, a valve casing in communication with and extending transversely of the supply pipe upon opposite sides thereof, a discharge port at the outer end of the valve casing, a by-pass having one end in communication with the valve casing between the supply pipe and discharge port and its opposite end in communication with said supply pipe, a spring actuated valve including an elongated member and a disk spaced therefrom, said elongated member normally interrupting the supply pipe while the opposed faces of the elongated member and disk define a passage providing a continuation of the supply pipe, and means connected to the valve whereby the latter may be operated to move the elongated member into position to simultaneously close the discharge port and by-pass, with the disk and elongated member upon opposite sides of the supply pipe to provide a passage through the valve casing.

In testimony whereof I affix my signature.

ANTHONY C. JAEGER.