C. FISHER.

VALVE.

APPLICATION FILED APR. 25, 1913.

1,166,754.

Patented Jan. 4, 1916.

Fig. 1.

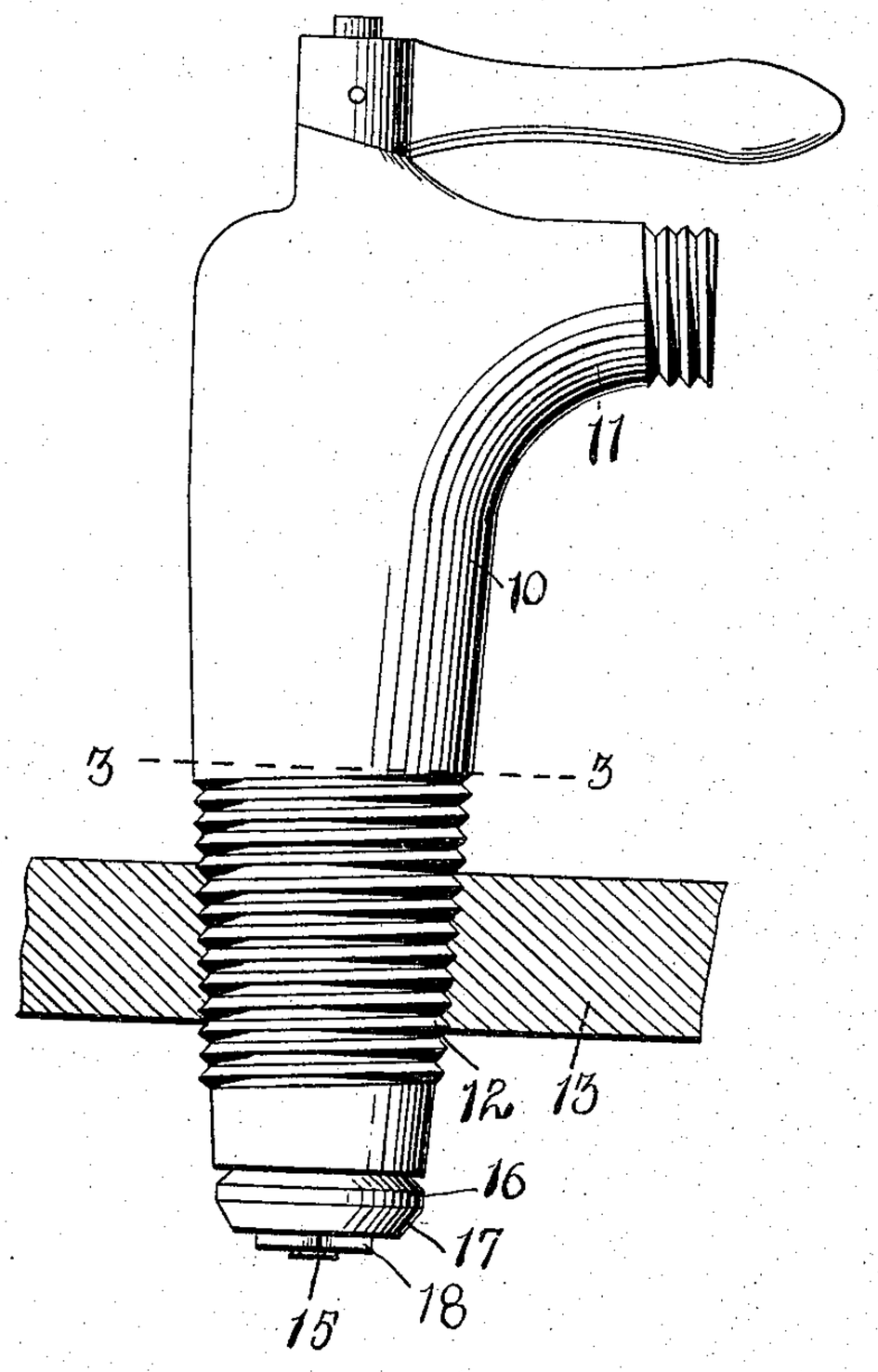


Fig. 2.

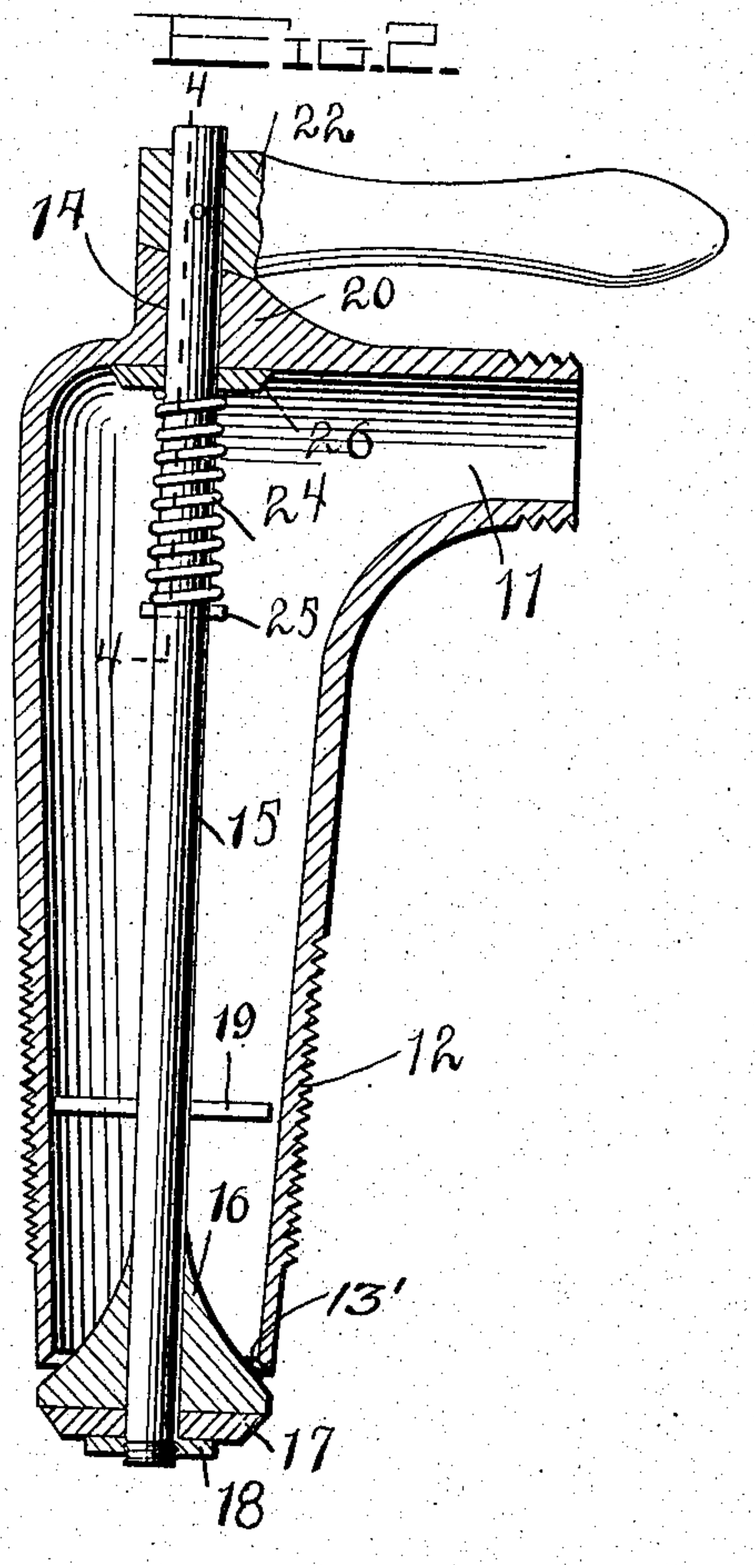


Fig. 3.

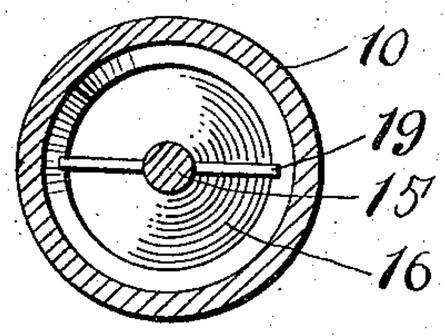
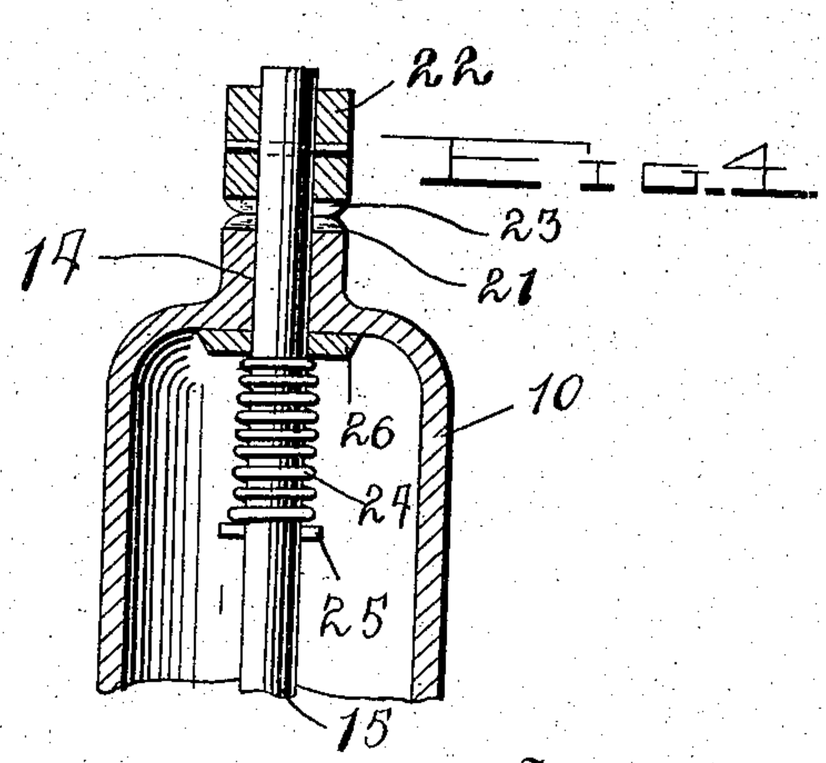


Fig. 4.



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VALVE.

1,166,754. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed April 25, 1913. Serial No. 763,650.

To all whom it may concern:

Be it known that I, CHARLES FISHER, a citizen of the United States, residing at Bloomingdale, in the county of Passaic, State of New Jersey, have invented certain new and useful Improvements in Valves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in valve structure.

The object of this invention is to provide a valve, the parts of which are so constructed and arranged that when the valve is closed the body portion thereof will be free from liquid so as to obviate the possibility of the valve casing bursting by reason of the freezing of liquid contained therein.

A further object is to improve the efficiency and simplify the general structure of the device of this character.

With these and other objects and advantages in view, the invention resides in the novel combination, formation and arrangements of parts more fully hereinafter described, illustrated in the accompanying drawings and particularly pointed out in the claim hereto appended.

Reference is had to the accompanying drawings, wherein similar characters of reference designate corresponding parts throughout the several views and in which—

Figure 1 is a side elevational view of the improved valve, Fig. 2 is a vertical elevational sectional view of what is shown in Fig. 1. Fig. 3 is a sectional view on the line 3—3 of Fig. 2. Fig. 4 is a sectional view on the line 4—4 of Fig. 2.

Referring more particularly to the drawings, wherein is shown a preferred form of the valve, 10 designates the casing which tapers inwardly and which is provided at its outer end with a lateral outlet 11. Intermediate of its length the casing is externally threaded as at 12 for engaging with the side wall of a barrel 13 or other receptacle. The inner end of the casing is provided with a beveled edge portion 13′ which forms the valve seat. The other end of the casing is formed concentrically with the valve seat with a bore 14 for receiving the valve stem 15 which carries the valve head. This valve head comprises a conical leather washer 16 which is held against displacement by the ring 17. A nut 18 is threaded on the end of the valve stem and serves to lock the ring in position. To prevent the valve stem from rocking when the valve is in an open position, a pin 19 is passed through the valve stem adjacent the head and has its ends adapted to slidably engage the interior of the casing. To provide means for actuating the valve stem to open and close the valve, that portion of the casing adjacent the bore 14 is provided with an extension 20 which terminates in a beveled cam face 21. The valve stem is extended outwardly and provided with a handle portion 22 keyed thereon and provided with a beveled cam face 23 adapted to coact with the face 21 to oscillate the valve stem 15 against the action of a coil spring 24 which encircles the stem interiorly of the casing and which bears against the outer end of the casing and a pin 25 passed through the stem. A leather washer 26 is preferably positioned between the spring and the adjacent end of the casing. Rotation of the handle will cause the said handle to move with relation to the casing and to actuate the valve stem to move the head with relation to the seat 13. The action of the spring 24 is sufficiently strong to hold the handle in any adjusted position. It will be seen that a structure has been provided wherein the valve head is positioned at the extreme interior end of the casing and that, when the valve is closed any liquid which is contained within the casing will escape by the outlet 11, thus obviating any danger of the casing bursting by reason of the freezing of liquid contained therein.

What is claimed is:—

A valve of the class described, comprising a substantially cylindrical casing closed at one end, a tubular lateral extension at said end of the casing, the other end of the casing being open and provided with a valve seat, a stem having one end slidably passed through the closed end of the casing, and extended outwardly of the open end of the casing, a valve head on said stem outwardly of the casing and adapted to close on said seat, a boss on the closed end of the casing having its end face beveled and provided

with a bore slidably receiving said stem, a handle provided with a transverse bore for receiving the stem, the bored portion of the handle having a beveled face to engage the beveled face of the boss, a pin passed through said handle and stem, and a spring surrounding the stem and bearing at one end against the closed end of the casing and acting on the stem to move said valve away from its seat.

In testimony, I affix my signature, in the presence of a witness.

CHARLES FISHER.

Witness:
SAMUEL R. DONALD.