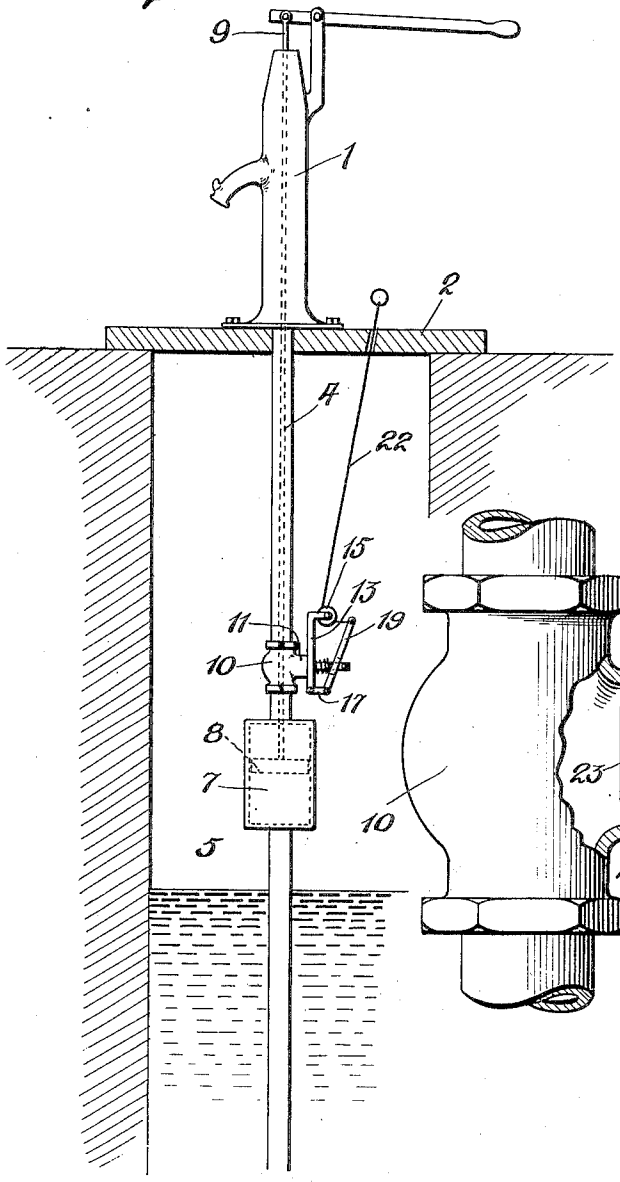
LE ROY G. WILBER.

VALVE.

APPLICATION FILED MAR. 5, 1920.

1,346,289. Patented July 13, 1920.

Fig. 1.



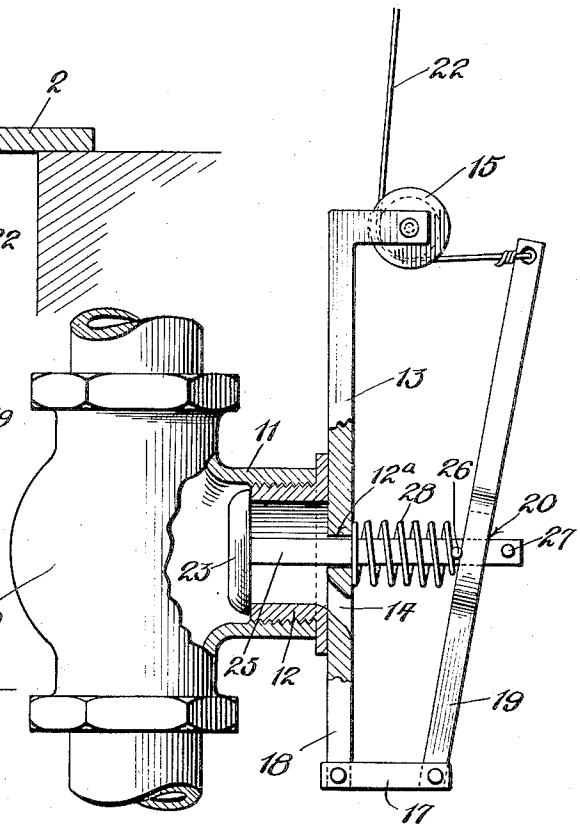


Fig. 2.

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LE ROY G. WILBER, OF SEQUIM, WASHINGTON.

VALVE.

1,346,289. Specification of Letters Patent. Patented July 13, 1920.

Application filed March 5, 1920. Serial No. 363,605.

To all whom it may concern:

Be it known that I, LE ROY G. WILBER, a citizen of the United States, and residing at Sequim, in the county of Clallam and State of Washington, have invented certain new and useful Improvements in Valves, of which the following is a specification.

This invention relates to improvements in valves primarily employed for draining pipes in pumps. The prime object of the invention is to provide a valve and means associated therewith for quickly and conveniently draining pipes out of reach in a well to prevent the water in the freezing zone freezing within the pipe. The invention also comprehends improvements in the details of construction and arrangement of parts which will be hereinafter described and claimed.

In the drawing:

Figure 1 is a sectional view of a well showing my improved valve attached to a pump pipe.

Fig. 2 is an enlarged detail view of my improved valve in a closed position.

Referring now more particularly to the drawings, 1 indicates a pump standard supported by a well platform 2; 4 a pipe extending downwardly from the pump standard and into the water in the well 5; 7 indicates a pump cylinder in the feed pipe 4; 8 a piston slidably mounted within the cylinder 7; and 9 indicates a rod connecting the piston 8 and the handle of the pump.

The parts thus far described are of usual construction, and form no specific part of my invention except to illustrate the application of the improvement.

10 indicates a threaded coupling in the pipe 4, just above the cylinder 7, and in the horizontal portion 11 of the coupling is threaded a plug 12. The head of the plug 12, has attached to it an arm 13, and extending through the same and the head is an axially disposed opening 12^a and below same is a drain opening 14. The arm 13 extends up beyond the coupling and its upper end is bifurcated to receive a guide pulley 15. The lower portion of the arm depends below the coupling as shown at 18. Pivoted to the depending portion 18 of the arm is a link 17, the opposite end of which is pivoted to the lower end of a lever 19, formed with an opening 20, in alinement with the opening 12^a in the arm. To the upper end of the lever is attached a rope 22, which passes around the guide pulley 15, and thence through an opening in the platform to be in convenient reach of an operator.

A valve 23, seats against the inner end of the plug 12, and from said valve extends a stem 25, which passes through the openings 12^a and 20. Studs 26 and 27, extend from the stem to confine the lever to permit of the latter operating the valve, a coil spring 28 on the stem is interposed between the arm 13 and the lever 19, to normally hold the valve in closed position.

In operation, the pump water usually accumulates in the pipe above the coupling and in cold weather freezes and serious results follow. According to my invention this difficulty can be conveniently overcome by simply pulling on the rope. This forces the lever 19 toward the arm 13, and through the medium of the stud 26.

The spring is compressed, and the valve 23 is removed from its seat against the end of the plug 11, and water above the coupling will drain through the opening 14 and into the well. After the water has been drained, and pull on the rope is released, the spring quickly restores the parts to normal position and the valve closed.

The invention is extremely simple in construction and is effective in operation, and the parts are so arranged as to avoid getting out of order.

What I claim is:

1. In combination, a water pipe, a T coupling connected to the water pipe, a hollow plug seated in the horizontal portion of the T coupling and formed with a centrally disposed opening and a drain opening below the same, an arm extending above and below the T coupling, a guide at the upper end of the arm, a valve normally seated against the inner end of the hollow plug, a stem extending through the centrally disposed opening, a lever having an opening through which the end of the stem extends, studs in the stem each side of the lever, a spring interposed between the lever and the arm to normally seat the valve, a link connecting the lower end of the lever and the lower end of the arm, and a flexible connection connected to the upper end of the lever and passing over the guide at the upper end of the arm, whereby to operate the lever and unseat the valve.

2. In combination, a water pipe, a T coupling in said pipe formed with a drain open-

ing, a valve for closing a lateral opening in the T coupling, an arm secured to one end of the T coupling, a lever, a link between one end of the lever and the arm, a connection between the valve and the opening, and a rope connected to the opposite end of the lever to operate the valve.

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

LE ROY G. WILBER.

Witnesses:
EUGENE HAY,
GEORGE W. O'BRIEN.