April 20, 1926. 1,581,941

W. H. MARTIN

SPRING CLOSURE FOR MOLASSES GATES

Filed Dec. 23, 1924

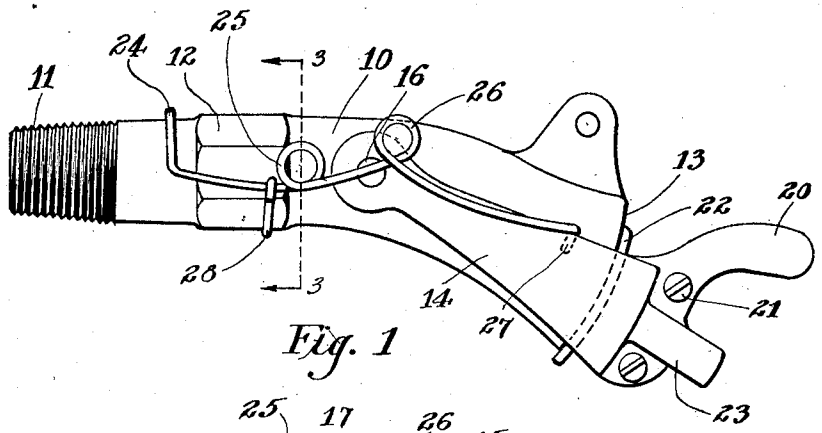


Fig. 1

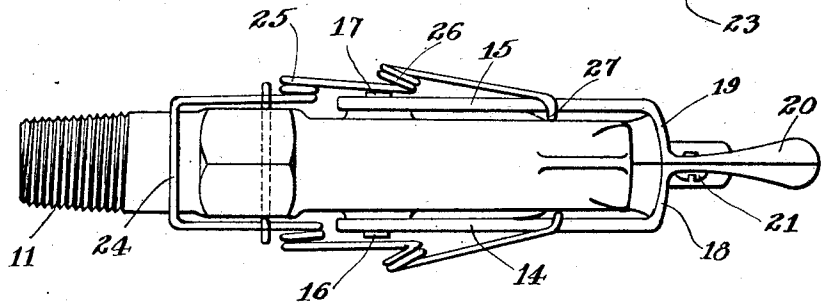


Fig. 2

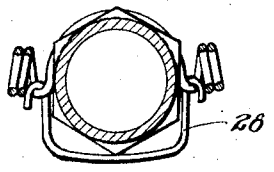


Fig. 3

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UNITED STATES PATENT OFFICE.

WILLIS H. MARTIN, OF LOS ANGELES, CALIFORNIA.

SPRING CLOSURE FOR MOLASSES GATES.

Application filed December 23, 1924. Serial No. 757,642.

To all whom it may concern:

Be it known that I, WILLIS H. MARTIN, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Spring Closures for Molasses Gates, of which the following is a specification.

This invention relates to improvements in molasses gates or valves of similar construction.

An object of the invention is to provide an improved molasses gate having a spring actuated closure which is adapted to urge the closure into closed position, so that when the closure is released after having been swung into open position, it will be automatically closed by means of a spring.

A further object of the invention is to provide a spring adapted to be readily and cheaply constructed which may be easily and quickly applied to molasses gates of ordinary or conventional construction.

With the foregoing and other objects in view, which will be made manifest in the following detailed description and specifically pointed out in the appended claims, reference is had to the accompanying drawings, wherein:

Figure 1 is a side elevation of the improved molasses gate.

Fig. 2 is a top plan view of the improved molasses gate.

Fig. 3 is a vertical section taken substantially upon the line 3—3 of Figure 1.

Referring to the accompanying drawings, wherein similar reference characters designate similar parts throughout.

The improved molasses gate consists of a downwardly curved spout or body 10, having one end threaded as at 11, so that the spout may be screwed into a barrel or similar container. A plurality of flat faces, as indicated at 12, may be formed upon the spout 10, permitting the application of a wrench so as to facilitate the application of the spout to the container. The forward end of the spout 10 is provided with a smooth curved surface, as indicated at 13. A pair of arms 14 and 15 are pivoted upon the sides of the spout 10, as indicated at 16 and 17 respectively. The arms 14 and 15 are bent toward each other, as at 18 and 19 respectively, and provide a handle 20. The forward ends of the arms 14 and 15 are secured together as by screws 21, and a closure plate 22, having a concave surface complementary to the convex surface 13, is secured or otherwise associated with the opposed portions 18 and 19. In certain types of molasses gates the closure plate 22 is urged against the convex surface 13 by means of a spring, which may be housed within the enlargement 23. The spring, which is adapted to urge the arms 14 and 15 and closure plate 22 into closed position, consists of a length of spring wire bent so as to extend over the top of the spout 10, as at 24. The spring wire extends forwardly toward the arms 14 and 15 and may be twisted to provide one or more coils 25 or 26. The forward ends of the spring wire bear against the upper surfaces of the arms 14 and 15 and are hooked or so bent as to engage the inner sides of the arms 14 and 15, as indicated at 27. Another small piece of wire 28 extends beneath the spout 10 and has its ends hooked over the section of spring wire, forming a spring proper so as to maintain the spring about the spout 10.

From the above it is seen that an improved molasses gate is provided which consists of a section of spring wire bent over the spout and which has its ends bent forwardly, adapted to engage or bear upon the arms of the closure, and that means extend beneath the spout which engages upon the spring for maintaining it about the spout. This spring may be easily and quickly applied to the spout and will efficiently maintain the closure in closed position or urge it into closed position upon release of the handle 20. The coils 25 and 26 serve to provide a greater elasticity to the spring wire.

Various changes may be made in the details of construction without departing from the spirit or scope of the invention as defined by the appended claims:

What I claim is:

1. In combination with a molasses gate having a spout and a closure having a pair of arms pivoted to the sides of the spout, spring means for closing the closure comprising a section of spring wire bent over the top of the spout, each end of the section extending forwardly and being bent to form a plurality of coils, the extremities of the ends being bent inwardly so as to bear upon the arms of the closure, and a second section of wire extending beneath the spout and having its ends secured to the ends of the first section behind said coils.

2. A spring closing device adapted to be

applied to molasses gates comprising a section of spring wire bent centrally so as to fit over the top of the spout of a gate, each end of the section extending forwardly from the bend and being bent to form a plurality of coils, the extremities of said ends being bent inwardly so as to engage upon the tops of the arms of the closure for the molasses gate, and means for securing said section upon the spout of the molasses gate comprising a second section adapted to be placed beneath the spout and having its ends engage upon the ends of the first section between the coils and the central bend.

3. A spring closing device adapted to be applied to molasses gates comprising a section of spring wire bent centrally so as to fit across the spout of a gate, each end of the section extending forwardly and being bent to form a coil, the extremities of said ends being bent inwardly so as to engage upon the arms of the closure for the molasses gate, and an attaching member adapted to be positioned on the opposite side of the spout from the central portion of the section of spring wire, said attaching member having hooked ends adapted to engage upon the section between the coils and the central bend.

In testimony whereof I have signed my name to this specification.

WILLIS H. MARTIN.