

H. N. ROTHWEILER.
 MEANS FOR SECURING PUMPS IN BARRELS.
 APPLICATION FILED SEPT. 10, 1914. RENEWED APR. 11, 1917.

1,246,661.

Patented Nov. 13, 1917.

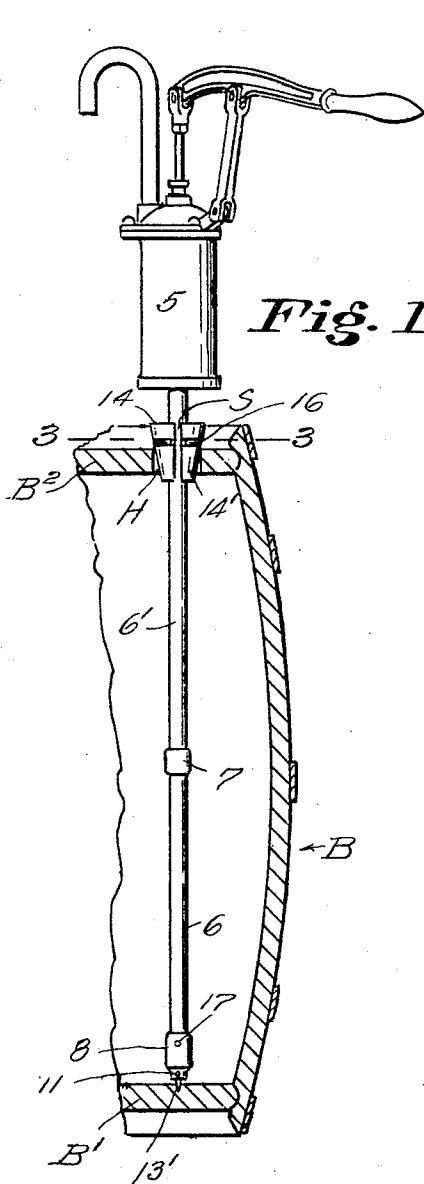


Fig. 1

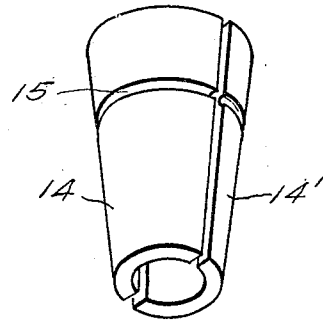


Fig. 4

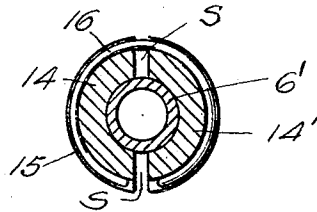


Fig. 3

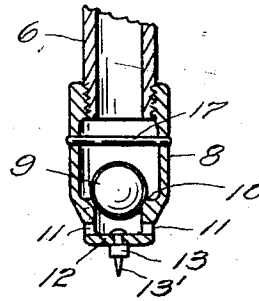


Fig. 2

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MEANS FOR SECURING PUMPS IN BARRELS.

1,246,661.

Specification of Letters Patent.

Patented Nov. 13, 1917.

Application filed September 10, 1914, Serial No. 861,000. Renewed April 11, 1917. Serial No. 161,372.

To all whom it may concern:

Be it known that I, HARVEY N. ROTHWEILER, a citizen of the United States, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Means for Securing Pumps in Barrels, of which the following is a specification.

This invention relates to liquid dispensing devices of the type illustrated and described in patent application Serial No. 801,583, filed by me November 18, 1913. The object of the present invention is to provide simple and conveniently applied means for rigidly securing the suction pipe of a pump or the like in a barrel or tank to reliably maintain the pump in operative position and afford vent openings for the admission of air to replace the liquid as it is withdrawn from the container.

The invention consists in the novel construction and combination of devices as will be hereinafter described and claimed.

In the drawings, forming part of this specification, Figure 1 is an elevational view of a pump with my invention applied for securing the same to a barrel, which is shown in section. Fig. 2 is a sectional view of the foot valve attached to the suction pipe of the pump. Fig. 3 is a sectional view through 3-3 of Fig. 1. Fig. 4 is a perspective view of the bung bushing shown detached.

The reference numeral 5 designates a pump cylinder secured to the upper end of a suction pipe desirably formed of two parts 6 and 6¹ which are connected by a coupling 7. Secured to the lower end of the pipe part 6 is the casing 8 of a non-return valve having therein a ball 9, which constitutes the valve proper, and formed with a seat 10 disposed above the peripherally arranged inlet holes 11. 17 represents a pin stop to limit the lift of the valve. The lower end of said casing is closed by a bottom wall 12 from which protrudes a stud 13 terminating in a sharp point 13¹ to penetrate in the bottom of B¹ of barrel B for the purpose of preventing any lateral movement of the lower end of the suction pipe.

The upper head B² of the barrel is bored with a hole H of a diameter sufficient to allow the foot valve casing 8 and the cou-

pling 7, if used, being readily introduced therethrough.

There accordingly remains an annular space in the hole H which is unoccupied by the pipe.

I provide for such space a bushing consisting of two parts 14 and 14¹ which are formed from a single piece desirably of wood, by first turning the same to the shape of a truncated cone with a circumferential groove 15 intermediate its length, then boring the piece axially to accommodate the pipe and, finally, sawing the piece diametrically to divide it into the complementary parts 14 and 14¹. By thus making the bushing with an internal bore to fit a pipe and dividing the bushing by a saw cut, it is obvious that when placed about the pipe the saw kerf will afford vent spaces S at diametrically opposite sides of the pipe. 16 represents a clasp of spring wire which is seated in the groove 15 of both bushing parts and serves to yieldingly hold the latter against the pipe when in use and to couple the bushing parts together when removed from the pipe. The bushing or pipe holder, as it may be termed, is placed with the smaller end below on the pipe and above the upper barrel-head B². It is then slipped down into the hole H to cause the bushing parts to be wedged or crowded in the space about the pipe to rigidly hold the pipe centrally of the hole by being contracted through the office of the tapering periphery of the bushing.

What I claim, is:—

1. In apparatus of the class described the combination with a barrel provided with a circular hole, and a pipe, of a conical bushing for said hole, said bushing being formed of two similar sections provided with opposing grooves to fit the pipe and affording vent spaces intermediate said sections at diametrically opposite sides of the pipe and also provide a circular periphery to fit said hole, and means for coupling said sections to yieldingly embrace the pipe.

2. In apparatus of the class described, the combination with a barrel having a circular hole, a pipe-bushing formed of a conical piece divided longitudinally to afford two similar members, each of said members be-

ing formed with a peripheral groove, and a spring embracing the members and seated in the respective grooves whereby the bushing members are coupled and adapted to be detachably secured to a pipe and accommodate itself to fit in said barrel hole by sliding the bushing axially upon the pipe.

Signed at Seattle, Wash., this 28th day of August 1914.

HARVEY N. ROTHWEILER.

Witnesses:

PIERRE BARNES,
E. PETERSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."