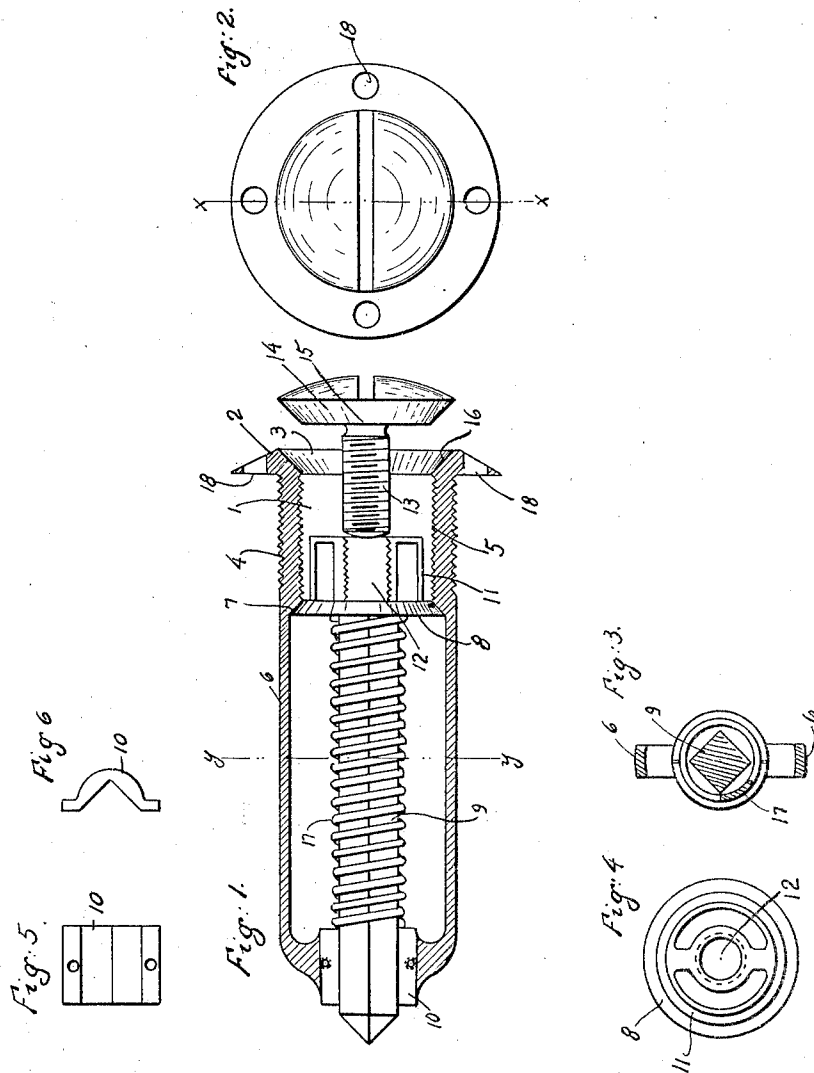


C. D. THORPE.
TAPPING DEVICE FOR BARRELS.
APPLICATION FILED APR. 11, 1919.

1,334,819.

Patented Mar. 23, 1920.



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By:

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TAPPING DEVICE FOR BARRELS.

1,334,819.

Specification of Letters Patent.

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Application filed April 11, 1919. Serial No. 289,445.

To all whom it may concern:

Be it known that I, CHARLES D. THORPE, a citizen of the United States, residing at Rock Island, in the county of Rock Island and State of Illinois, have invented certain new and useful Improvements in Tapping Devices for Barrels, of which the following is a specification.

My invention has reference to tapping devices for barrels and the like, and has for its purpose to furnish an outlet for the contents of the barrel which will be tightly sealed when not in use, and which will be automatically opened upon the introduction into the device of a faucet of suitable construction. It is more specially designed for use with barrels containing paints or oils, or similar liquids which are usually drawn from the receptacles in small quantities.

The sealing of the device is accomplished by a pair of oppositely acting valves, provided with actuating means which compels a coöperation of the valves, so that each virtually acts as an anchorage for the other, producing a perfectly tight chamber between the contents and the outside atmosphere.

In the drawings:

Figure 1 is an illustration of my invention in longitudinal section, on the broken line $x-x$ of Fig. 2. Fig. 2 is an outer end view thereof. Fig. 3 is a cross-section on the broken line $y-y$ of Fig. 1. Fig. 4 is an outer end view of the valve 8. Figs. 5 and 6 are end views and an inner face view, respectively, of one of the guides 10.

1 represents a cylindrical body provided on its outer end with an annular flange 2, surrounding the opening 3 in the end of such body. The part 1 has an exterior thread 4, by means of which it can be firmly seated in the usual opening, or bung-hole in a barrel or cask. On the interior of the body 1 is a thread 5, adapted to receive a similarly threaded end of a faucet, not shown in the drawings herein, but which construction is well known in the art to which it belongs.

Projecting inwardly from the body 1 is a pair of arms 6, and the inner end of said body is provided with a beveled valve-seat 7, adapted to receive a similarly formed valve 8 on the end of a stem 9, having polygonal faces. The inner end of the stem 9 is slidable in guides 10 on the ends of the arms 6, the inner faces of such guides conforming to the shape of the stem. On the outer face of

the valve 8 is a frame 11, having a central threaded opening 12, adapted to receive the threaded stem 13 of a screw-plug 14. Such plug is preferably provided with a bevel edge 15 capable of being tightly seated in a corresponding wall 16 of the opening 3. The valve 8 is held normally in position on the seat 7 by means of an extensile coiled spring 17 interposed between said valve and the guides 10 on the arms 6.

The flange 2 may be provided with perforations 18, for the use of screws or other fastening means, for holding the device more securely in place in the barrel.

When it is desired to keep the barrel closed the plug 14 is turned downwardly until it is tightly seated in the opening 3, forming an outer valve therefor. When thus seated a further turning of the plug will operate to draw the valve 8 more tightly against its seat, while at the same time such valve, with the frame 11 thereon forms an anchorage for the threaded stem of the plug, and assists in more securely seating the same.

When it is desired to remove a part of the contents of the barrel the plug 14 is removed, and the threaded end of a faucet inserted in the part 1. As the faucet comes in contact with the frame 11, the valve 8 is forced open against the pressure of the spring 17, permitting the contents of the receptacle to escape through the opening in the faucet. The faucet is sufficiently seated to prevent escape of the liquid on the outside of the faucet before the valve opens, and in removing the faucet such valve is seated before the same is fully withdrawn.

The pressure exerted by the contents of the barrel upon the inner face of the valve 8 also assists in holding said valve in closed position when the device is not in use for the purpose of permitting removal of the contents.

By means of the polygonal stem 9 and guides therefor the valve 8 and frame 11 are held from rotation while the stem 13 is being turned in either direction.

What I claim and desire to secure, is:

1. A device of the class described, comprising a cylindrical member adapted to be installed in an opening in a barrel; valves in the inner and outer ends of said member provided with means for simultaneously seating said valves; means for holding said inner valve normally in position; and means

carried by said inner valve adapted for engagement by the inner end of a faucet for the purpose of opening said valve upon such faucet being introduced a desired distance into said cylindrical member.

2. A device of the class described, comprising a cylindrical member adapted to be installed in the bung-hole of a barrel, and provided with inner and outer valve seats; an inner valve provided with a guide stem adapted for engagement with the inner valve-seat; means for holding said valve normally in position in said seat; a frame on the outer end of said valve provided with a central threaded opening; and a screw plug having a threaded stem adapted to engage said threaded opening and forming a valve for said outer valve seat.

3. A device of the class described, comprising a cylindrical member adapted to be installed in the bung-hole of a barrel, provided with a valve-seat at each of its ends, and having interior means for gradual engagement with the end of a faucet; a plug provided with an inwardly projected stem, and capable of engaging the outer valve-seat of said member; a valve adapted to be seated in the inner end of said member; yielding means for holding said valve normally closed; and means on the outer face of said valve adapted to cooperate with said stem to draw said plug and valve toward each other, and tightly close said cylindrical member.

4. A device of the class described, comprising a cylindrical member, adapted to be installed in the bung-hole of a barrel, and provided with a valve-seat at each of its ends; a frame connected with the inner end of said member provided at its end with guide-plates; a stem slidable in said guides and provided on its outer end with a valve adapted to engage the inner valve-seat of said member; a plug adapted for turning, forming a valve for the outer end of said member, and provided with an inwardly projected threaded stem; a frame on the outer face of the inner valve having a threaded opening adapted to receive said stem and engageable by the inner end of a faucet; and means for holding said inner valve normally in position.

5. In a device of the class described, a cylindrical member, adapted to be installed in the bung-hole of a barrel, and provided in its opposite ends with beveled valve-seats; a plug adapted to be turned, having a beveled face for engagement with the outer valve-seat, and provided with an inwardly projected threaded stem; a valve having a beveled edge for engagement with the inner valve-seat and provided with a slidably mounted stem; a frame on the outer face of said valve having a central threaded opening to receive said stem; and means for holding said valve normally in position.

In testimony whereof I affix my signature.

CHARLES D. THORPE.