

J. S. McLEROY.
BUNG EXTRACTOR.
APPLICATION FILED AUG. 27, 1909.

965,481.

Patented July 26, 1910.

2 SHEETS—SHEET 1.

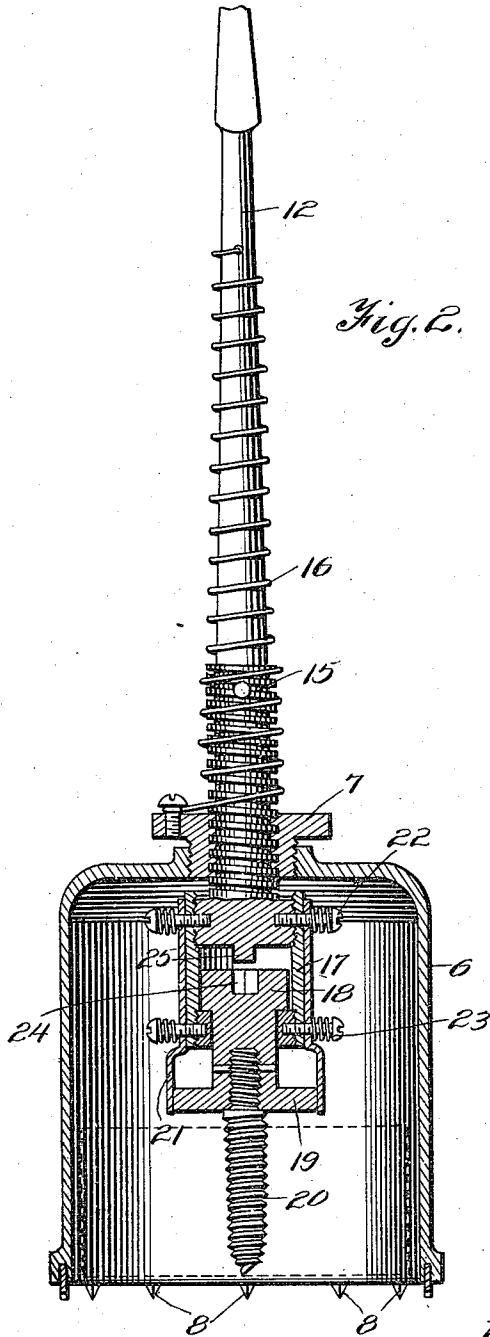


Fig. 2.

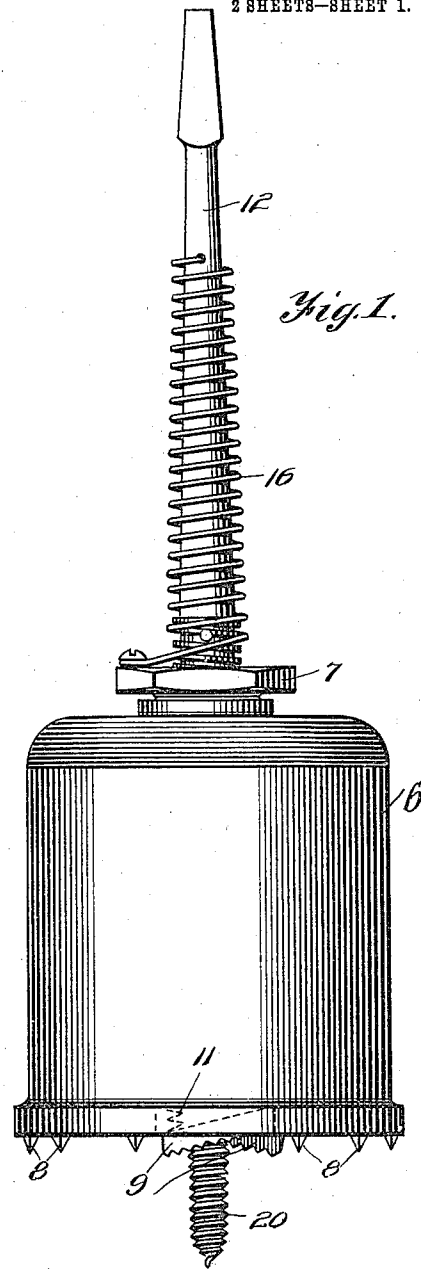


Fig. 1.

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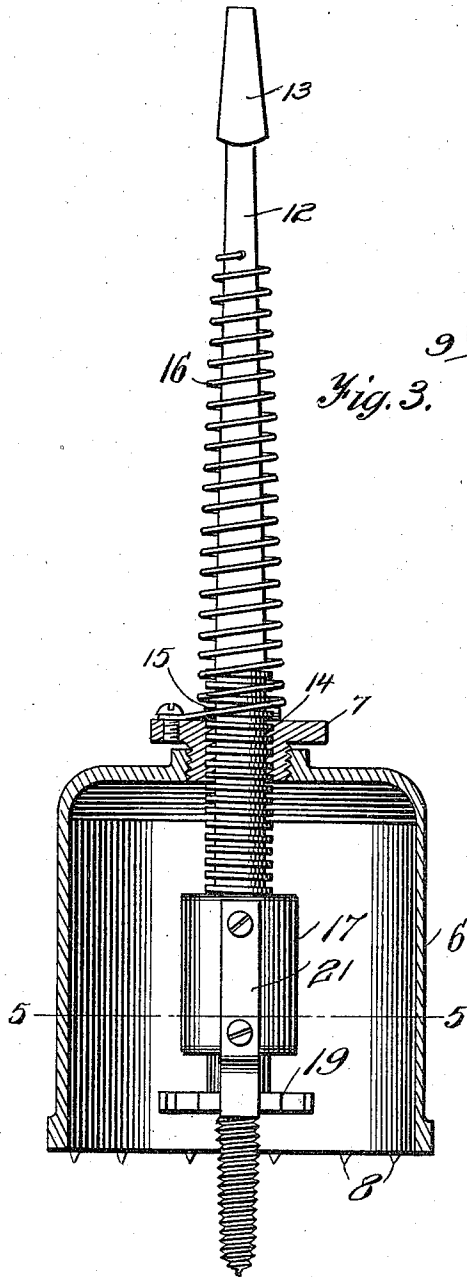


Fig. 3.

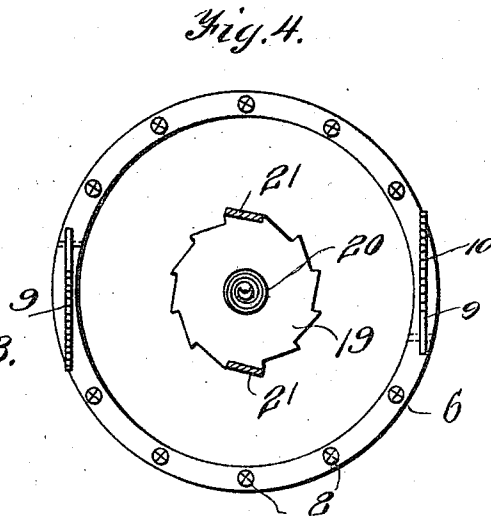


Fig. 4.

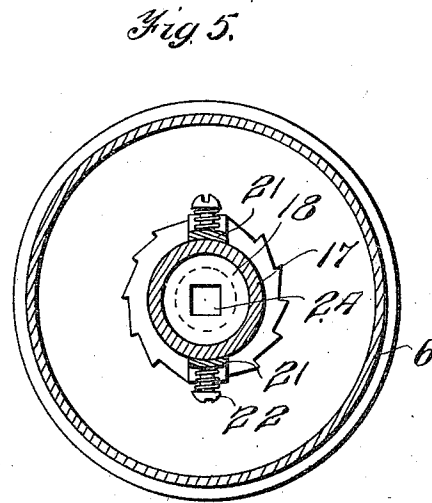


Fig. 5.

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UNITED STATES PATENT OFFICE.

JOSEPH S. McLEROY, OF PENSACOLA, FLORIDA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF THREE-FOURTHS TO WILLIAM C. LE GALLAIS AND ONE-FOURTH TO LESLIE E. BROOKS, BOTH OF PENSACOLA, FLORIDA.

BUNG-EXTRACTOR.

965,481.

Specification of Letters Patent.

Patented July 26, 1910.

Application filed August 27, 1909. Serial No. 514,966.

To all whom it may concern:

Be it known that I, JOSEPH S. McLEROY, a citizen of the United States, residing at Pensacola, in the county of Escambia and State of Florida, have invented new and useful Improvements in Bung-Extractors, of which the following is a specification.

This invention relates to bung extractors or implements for extracting bungs from casks, barrels, kegs and the like without injury to the package or to the bung itself; and it has for its object to provide a device of this class which shall possess superior advantages in point of simplicity, durability and general efficiency.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction, and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention; it being however understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawings: Figure 1 is a side elevation of the improved bung extractor. Fig. 2 is a vertical sectional view of the same as it appears after extracting a bung. Fig. 3 is a vertical sectional view taken substantially at right angles to Fig. 2 and showing the device as it appears previous to engagement with the bung. Fig. 4 is a bottom plan view. Fig. 5 is a horizontal sectional view taken on the plane indicated by the line 5—5 in Fig. 3.

Corresponding parts in the several figures are denoted by like characters of reference.

A cylindrical socket 6, of inverted cup shape, is provided at its upper end with a nut 7 which may be threaded into or otherwise suitably connected with said socket; or said nut may be integral with the socket if preferred. The lower edge of the socket is provided with prongs 8 and with barrel engaging teeth 9 which latter are pivotally supported in slots or recesses 10 in the edge of the socket; said teeth being actuated in a downward direction by springs 11 which

admit of the retraction of the teeth within the slots or recesses.

12 designates a shank, preferably of tapering shape, said shank being provided at one end with a non-circular seat 13 adapted to be engaged by a wrench or other means, such as a brace, whereby the device may be operated; the shank 12 is provided for a portion of its length with a thread 14 of large pitch engaging the nut 7; the downward movement of the shank through the nut being limited by a transversely disposed key or stop member 15. A retraction spring 16 is terminally connected at one end with the shank 12 and at the other end with the nut 7 of the socket 6; said spring serving by tortional action to lower the threaded portion of the shank 12 within the socket or to lift the latter upon the shank as the case may be. That portion of the shank 12 which lies within the socket 6 carries a sleeve 17 which may be connected therewith in any suitable convenient manner, and said sleeve carries at its lower end a plug 18 which is swiveled within said sleeve so as to be axially revoluble with relation thereto; the lower extremity of the plug 18 carries a ratchet wheel 19 and it has a downwardly extending sharp pointed screw 20 which is securely connected therewith, and which is threaded reversely to the threaded portion 14 of the shank 12; the said threaded portion 14 being preferably left handed while the screw 20 is a right hand screw. The sleeve 17 is provided with spring-actuated pawls 21 engaging the ratchet wheel 19; said pawls being preferably held in position by means of screws 22 which are also utilized for assembling the parts of the device and upon the shanks of which the pawl actuating springs 23 are coiled. The plug 18 is slidably as well as revolubly supported with reference to the sleeve 17, and said plug is provided with a non-circular recess 24 adapted for engagement with a correspondingly shaped stud 25 projecting at the lower extremity of the shank 12 with which latter the plug 18 may thus be connected for rotation.

When the parts of the device are properly assembled, it will be seen that by the action of the retracting spring 16 the socket 6 is elevated upon the shank or handle until it abuts upon the key 15; and the screw 20 will

thus be projected below the lower edge of the socket as will be clearly seen in Figs. 1 and 3. By applying the point of the screw to a bung, and pressing downward upon the shank 12, the plug 18 is elevated until the projection 25 is placed in engagement with the recess 24 of the plug 18; the shank 12 is now rotated by a wrench, a brace or other suitable means, and the screw 20 will enter the bung until the lower toothed edge of the socket engages the barrel with reference to which it is held against rotation by the teeth and prongs 9 and 8. By continuing the rotation of the shank 12, the portion 14 of the shank which is threaded reversely to the screw 20, and the thread of which is of large pitch, will be thrown into action, and the shank with its related parts will be elevated with reference to the socket, thus extracting the bung which will be accommodated within the socket. Immediately upon the extraction of the bung, and when the apparatus is removed from the barrel, the retracting spring 16 which during the operation has been wound or coiled upon the shaft will become unwound or slacked, and will cause the parts to resume their initial position with relation to one another. The bung may now be removed from the screw or bit 20 which is meanwhile held against rotation by the pawls 21 and the ratchet 19.

Having thus described the invention, what is claimed is—

1. In a bung extractor, a socket having a nut, a shank having a thread of large pitch engaging the nut, and a retracting spring connecting the shank with the nut.

2. In a bung extractor, a socket having a nut, a shank having a thread of large pitch engaging the nut, a retracting spring con-

necting the shank with the nut, a sleeve securely connected with the shank within the socket, a plug slidably and rotatably connected with the sleeve, means for preventing rotation of the plug relatively to the shank, means for preventing rotation of the plug in one direction with relation to the sleeve, and a sharp pointed screw projecting from the plug and threaded reversely to the threaded portion of the shank.

3. In a bung extractor, a socket having a nut, a shank having a threaded portion of large pitch engaging the nut, a sleeve connected with the shank within the socket, a plug swiveled in the sleeve and longitudinally movable with reference thereto, said plug being provided with a non-circular recess and the shank being provided with a non-circular projection adapted to engage said recess, a ratchet wheel upon the lower extremity of the plug, spring actuated pawls mounted upon the sleeve and engaging the ratchet wheel, the latter being longitudinally movable with reference to the pawls, and a sharp pointed screw projecting from the plug and threaded reversely to the threaded portion of the shank.

4. In a device of the character described, a socket having a nut, a shank having a threaded portion of large pitch engaging the nut, a retracting spring connecting the shank with the nut, and a key or stop member to limit the movement of the shank with relation to the socket.

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

JOSEPH S. McLEROY.

Witnesses:

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VERA McDAVID.