

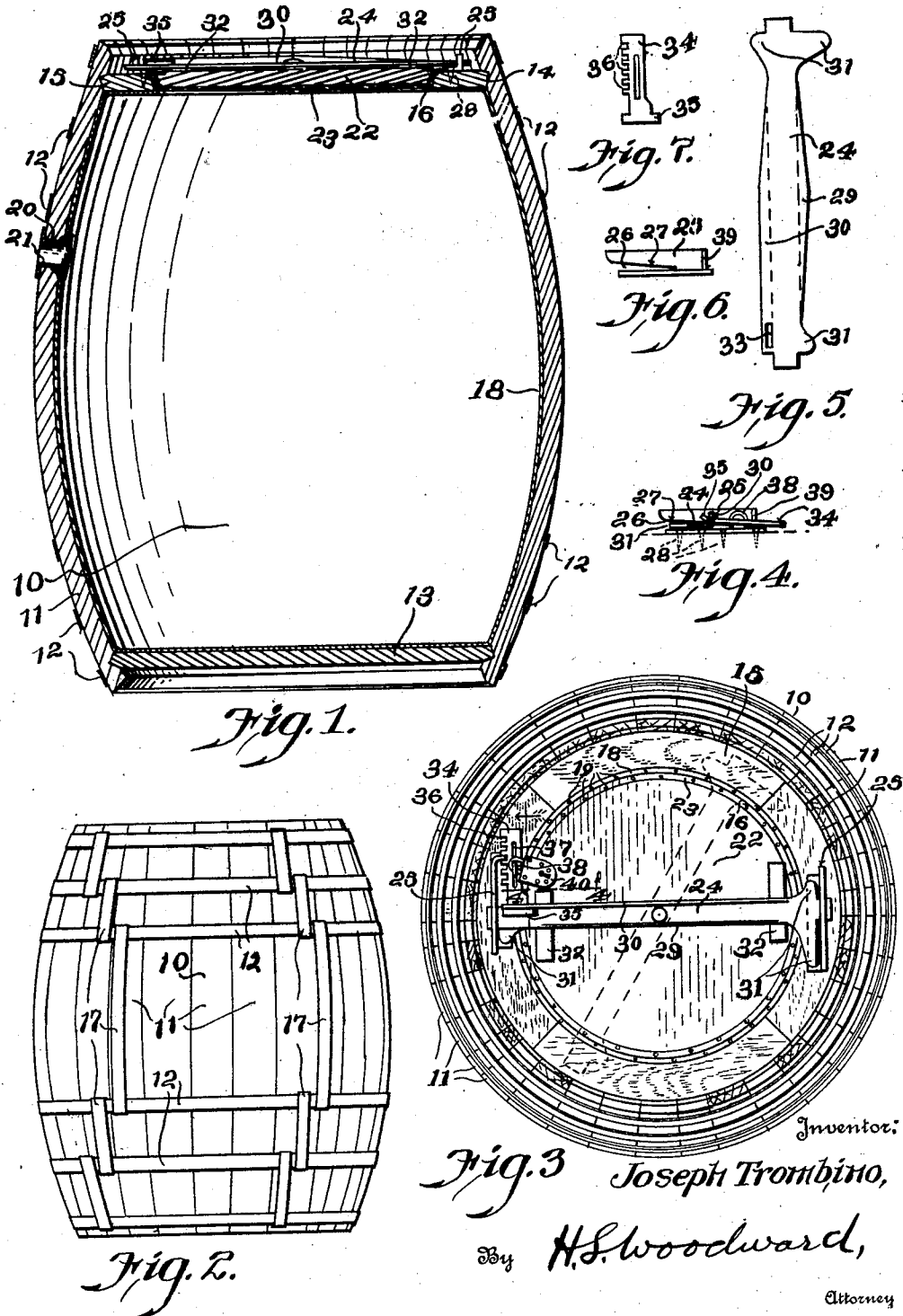
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J. TROMBINO

BARREL CONSTRUCTION

Filed Dec. 16, 1922



UNITED STATES PATENT OFFICE.

JOSEPH TROMBINO, OF WASHINGTON, DISTRICT OF COLUMBIA.

BARREL CONSTRUCTION.

Application filed December 16, 1922. Serial No. 607,329.

To all whom it may concern:

Be it known that I, JOSEPH TROMBINO, a subject of the King of Italy, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Barrel Construction, of which the following is a specification.

The invention has for an object to provide an improved means for shipping liquids safely in barrels, and to prevent removal and substitution of contents. It is an especial object to provide a barrel for the shipment of olive oil or other valuable liquids. In the traffic in olive oil it frequently happens that unauthorized persons open the bungs and draw off all or a portion of the contents, sometimes substituting inferior oils. This may occur before shipment, while upon the docks, or while in the hold of a ship, or after delivery to the consignee, where barrels stand about in such manner that opportunity is afforded for theft in the way indicated.

My improvement aims particularly to provide an improved method of locking a barrel, whereby it will not be possible for the contents to be removed by unauthorized persons, but ready filling of the barrel or removal of the contents may be accomplished by proper persons.

It is also an aim to effect an improvement in lined barrels whereby the retention of the contents without loss of bulk and without impairment of the quality may be effected over long periods.

A further object of the invention is to enable the installation of my locking construction on casks of the ordinary type in which wooden staves held by metal hoops comprise the walls in the main.

Additional objects, advantages and features of invention reside in the construction, arrangement and combination of parts involved as may be understood from the following description of one embodiment of the invention, and accompanying drawings, in which:

Figure 1 is a vertical sectional view of my barrel,

Fig. 2 is an elevational view of the barrel,

Fig. 3 is a top view, showing the ported head and tightening and locking device for the closure.

Fig. 4 is a fragmentary sectional view of

the locking device on the line 4—4 of Fig. 3.

Fig. 5 is a plan of the blank for the locking bar,

Fig. 6 is an elevation of the cleat,

Fig. 7 is a plan of the blank for the latch.

There is illustrated a cask 10 which may be formed of staves 11 held together by hoops 12, a bottom head 13 of usual form being provided, while in the groove 14 at the opposite end of the barrel, a ported head 15 is provided having a port opening 16 therethrough circular in the present instance, though it may be of other form, if desired. The hoops may be held against loosening by link straps 17 connected therebetween.

The entire interior of the cask is lined with metal or skin 18, which is fitted as nearly as practicable to the shape of the cask. This lining is extended out through the port opening and in the case where skin is employed secured by means of tacks 19 or other means.

The edges of the opening 16 are preferably chamfered outwardly and the skin arranged to fit smoothly within the opening. Any kind of cleaned and dried skin has been found satisfactory. In case it is desired to form a bung hole in the container, this may be formed, as at 20 and in the bung hole a metal ferrule or nipple 21 fitted having an external flange fitted snugly against the face of the cask, and flared at the inner end, and fitted over the adjacent edge portions of the lining 18. In case a metal lining is employed the fitting 21 may be soldered to the lining.

A closure 22 is provided shaped to fit snugly in the opening 16, its inner surface and edges being covered with a facing material 23, similar to that of the lining 18. The edges of the closure are inclined so as to wedge in the opening 16, and when the abutting edges are covered with skin, it is found that a very tight joint may be obtained between the port and the closure, with great ease.

A fastening bar 24 is pivoted centrally of the closure 22, its ends projecting beyond the opening, and at opposite sides of the opening cleats 25 are secured to the ported head, having wedge slots 26 therein, into which respective ends of the bar 24 may be forced, whereby the bar will be pressed in-

ward against the closure, by the inclined edges 27 at the top sides of the cleat slots. The cleats may be formed of sheet metal and have base flanges by which they may be secured with screws 28 to the head 15. The bar may be of any simple form if desired, and may also be formed of sheet metal, with stiffening flanges 29—30 turned up at the sides. Also, if desired, tongues 31 may be formed on the bar projecting so as to cover the screws or other fastenings of the cleats when the bar is in locked position, so that a screw driver cannot be then used to remove the screws. Slide or wear plates 32 may be provided on the surface of the closure if desired, so that the bar may press upon them instead of against the surfaces of the closure.

The flange 30 close to the extremity of the bar is formed with a horizontal slot 33 close to the top of the bar, and slidable in this slot there is a latch hasp 34 having projections 35 at each side forming a head which prevents the latch from being drawn entirely through the slot. The latch is notched at one side as at 36, and provided with a longitudinal slot 37 adapted to fit snugly over a staple 38 mounted on the base flange of the adjacent cleat 25. The latch is disposed with its notched side adjacent the cleat, and the end portion of the cleat is turned at right angles toward the latch so as to form a lock flange 39 to fit in one of the notches of the latch whenever the latch is pressed down over the staple.

In the use of the invention, the barrel and parts being constructed as described, the closure 22 being removed, the cask may be filled, and the closure being replaced, a turn of the bar 24 will engage it with the cleats so as to tighten the closure in the port opening 16. The latch 34 being in place in the slot 33, it may be moved pivotally and pressed down around the staple, the flange 39 thereby being engaged in one of the notches of the latch so as to lock the bar 24 in tight engagement with the cleats and holding the closure securely in place. It should be observed that the slot 33 is much longer than the major width of the staple, so that no matter what the position of the bar 24, in the cleats, the latch may

always be engaged over the staple. If, now, a padlock 40 or other key-operated device be engaged through the staple, the latch cannot be lifted to release the bar 24 until a person with the key unfastens it.

The bung hole may be closed in the usual way and sealed in a manner to prevent its opening without detection, or the bung hole may be omitted so that only with a key could the contents be obtained.

What is claimed is:—

1. A cask of the character described, comprising a chambered body having a port opening in the head thereof, a closure element adapted to wedge in the opening, a rotating fastening member, and means co-engageable between the closure and head to lock the rotating member in fastening position.

2. In a cask of the character described, a barrel body, a head therein having a port, a closure adapted to wedge in the opening, a rotatable bar pivoted centrally of the closure, wedge devices at opposite sides of the opening adapted to receive the ends of the bar and wedge it inwardly, a latch device having a pivotal relation to the bar extended laterally therefrom, means to engage the latch in one position to hold it against relative movement with said bar, and means to lock the latch in engaged position.

3. In a barrel element of the character described, a head having an access opening, a closure therefor, a locking bar pivoted concentrically of the head on the closure securing devices on the head constructed and positioned to engage the bar operatively under rotation in one direction, including a cleat device having an inturned flange at one end vertical to the head, a longitudinally slotted hasp pivoted on the bar notched at one side to engage and receive the flange therein adjustably, and a staple positioned to engage through the hasp and hold it in engaging relation to said flange.

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

JOSEPH TROMBINO.

Witnesses:
FELICE BIANCO,
R. H. BAGBY.