No. 712,234. Patented Oct. 28, 1902.

O. ANDERSON.

STORING OR SHIPPING VESSEL.

(Application filed May 19, 1902.)

(No Model.)

Fig. 1.

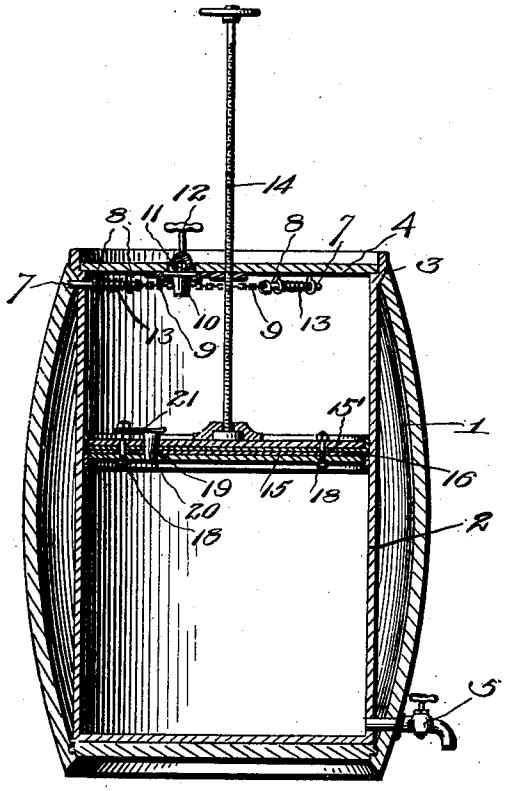


Fig. 2.

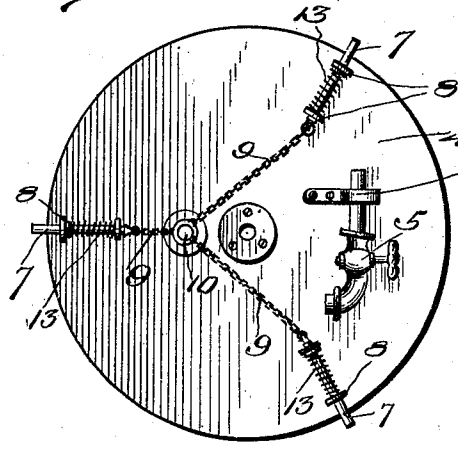


Fig. 3.

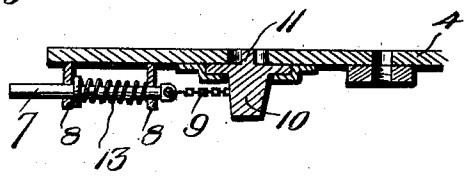
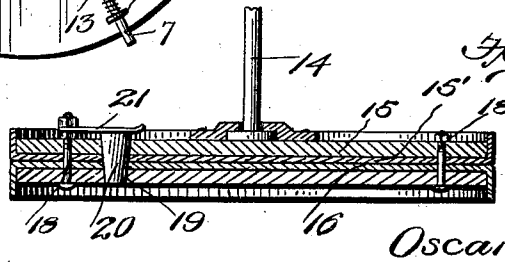


Fig. 4.



Witnesses

E. C. Hunt

E. Abrillson

Inventor

Oscar Anderson,

By A. R. Wilkinson & Co

Attorneys

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

OSCAR ANDERSON, OF IRON MOUNTAIN, MICHIGAN.

STORING OR SHIPPING VESSEL.

SPECIFICATION forming part of Letters Patent No. 712,234, dated October 28, 1902.

Application filed May 19, 1902. Serial No. 107,978. (No model.)

To all whom it may concern:

Be it known that I, OSCAR ANDERSON, a citizen of the United States, residing at Iron Mountain, in the county of Dickinson and State of Michigan, have invented certain new and useful Improvements in Storing or Shipping Vessels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a packing or storing vessel for domestic use or shipping purposes.

The object of the invention is to provide a vessel in which carbonated or aerated or other liquors or liquids may be kept without liability of loss of the gases or contents by leakage or evaporation and which is designed to prevent deterioration or contamination of the liquid by the contact of air therewith and also to provide a force feed, whereby the contents of the vessel may be forced out as desired for use and conducted to any convenient adjacent point.

With the above and other objects in view, which will readily appear as the nature of the invention is better understood, said invention consists in certain novel features of construction and combination and arrangement of parts, which will be hereinafter fully described, defined in the appended claims, and illustrated in the accompanying drawings, in which—

Figure 1 is a central vertical section showing the application of the invention to an outer container. Fig. 2 is a bottom plan view of the cover or head. Fig. 3 is a detail fragmentary section through the cover. Fig. 4 is an enlarged vertical section through the follower.

The present invention is applicable to different kinds of containers for the stated purpose. In the present instance I have shown the same, for purposes of illustration, as used in connection with a keg or barrel, without intending to limit it thereto or to use in connection with any other specific kind of container.

The numeral 1 in the drawings represents a cask, barrel, or other suitable form of inclosing casing in which is placed a liquid-containing cylinder 2, which may be used as a receptacle for beer, ale, wine, or other malt, spirituous, or carbonated liquors or beverages, and which is seamless and of such relative size as to snugly conform to the internal diameter of the container at top and bottom. The cylinder 2 is closed at bottom, but is open at top and has its upper end offset, as shown at 3, to conform to the chine of the casing and to form a seat for a head or cover 4, which serves as a closure for the cylinder. A faucet 5 is adapted to be inserted in corresponding bung-holes or openings in the outer container and cylinder for drawing off the contents as desired. A clip or holder 6, applied to the cover, is used to secure the faucet when the goods are shipped, in which event the bung-holes or openings are closed by a suitable stopper or bung. When it is desired to conduct the liquid any distance from the container, any other preferred form of valved conductor may be employed. The cover is locked in position by means of radially-movable bolts 7, sliding in guides 8 upon the under side of said cover and connected by chains 9 or other flexible connections with turning device 10. This turning device is suitably mounted to have rotary movement upon the cover and is provided with an upwardly-extending shank 11, adapted to be engaged by a suitable form of key 12, by means of which the head may be turned in one direction to simultaneously retract the bolts. A spring 13 is provided for projecting the bolts to lock the cover. When the cover is fitted in position upon the upper end of the inner cylinder, the bolts are held retracted by turning the head in the proper direction to wind up the cords or flexible connections thereon through the instrumentality of the key, and when the head has been fitted in position the key is detached, allowing the bolts to be forced outward under the action of the springs and to seat within corresponding sockets or openings formed in the outer container and inner shell or cylinder.

Mounted to rotate in a screw-threaded opening in the cover is a screw-shaft 14, which is swiveled at its inner or lower end to a follower 15, conforming to the internal diameter of the inner vessel or cylinder 2. This follower is employed as a force feed when re-

quired to expel the contents of the container and as a seal to prevent the access of air to such contents and the escape of the gases therefrom. The head comprises upper and lower sections, between which are fitted packing-disks 15′ and 16, which have outwardly-projecting ends turned in reverse directions, so as to lie against the inner wall of the cylinder and serve as a gasket to prevent access of air between the follower and liquid contained in the vessel or the escape of gas from said liquid. The parts of the follower are held connected by bolts 18, which clamp the packing-disks against movement. The follower is provided with a vent port or passage 19, adapted to receive a plug valve or stop 20, which is secured in position when the follower is in use and is adapted to be removed when it is desired to withdraw the follower from the inner cylinder or vessel. This valve or stopper is held in place by means of a spring-actuated detent 21, pivotally mounted upon one of the bolts 18, so as to be moved into and out or engagement with said plug. In the normal operation of the device when the follower is employed to seal the top of the container or vessel the valve is held closed by the spring-detent, whereby the escape of gas from the liquid contents and the access of air thereto through the port or passage is prevented. When it is desired to withdraw the follower or to elevate it in the inner vessel or receptacle, the valve 20 is opened or detached by moving the detent out of engagement therewith and withdrawing said valve from the port or passage, allowing air to enter the container below the follower to fill the vacuum therein and permit of the withdrawal of the follower.

As stated, the device may be used for domestic use for the storage of liquors of various kinds and for shipping liquors from place to place. In both cases it is desirable where carbonated liquids are contained within the vessel to prevent the escape of the gases, and where other liquids are stored in the vessel it is desirable under many conditions to prevent the access of air thereto. By means of the screw stem or shaft 14 the follower 15 may be adjusted as desired to suit the amount of liquid contained within the vessel and to force the same down as the liquid is gradually withdrawn, thereby forming a perfect seal to prevent either the escape of gases or the access of air to the lower portion of the vessel in which the liquid is contained. By forcing the follower down through the instrumentality of the screw stem or shaft the contents of the vessel or container may be forced out under pressure and delivered through a suitable conductor substituted for the faucet to any suitable point in proximity to the container.

It will thus be seen that the invention provides a construction which is useful under all conditions where liquids are to be stored or shipped and are intended to be sealed in such manner as to prevent the escape of gases or the contamination of the liquid by contact with atmospheric air.

From the foregoing description, taken in connection with the accompanying drawings, it is thought that the construction, mode of operation, and advantages of my improved packing or storing vessel will be readily apparent without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with an outer container, of a cylinder arranged therein, a cover for closing the cylinder, spring-actuated bolts for securing the cover and cylinder to the container, a head connected to said bolts for retracting the same in unison, and means for operating said head to retract the bolts, substantially as specified.

2. The combination with an outer container; of a cylinder arranged therein, a cover closing the cylinder, means for locking the cover and cylinder in position upon the container, a follower within the cylinder, and packing-disks clamped by the follower and provided with portions projecting in opposite directions and bearing against the inner wall of said cylinder, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

OSCAR ANDERSON.

Witnesses:
R. T. MILLER,
C. A. OLSON.