

(No Model.)

H. W. RICE.
TAPPING CASKS, &c.

No. 545,377.

Patented Aug. 27, 1895.

Fig. 1.

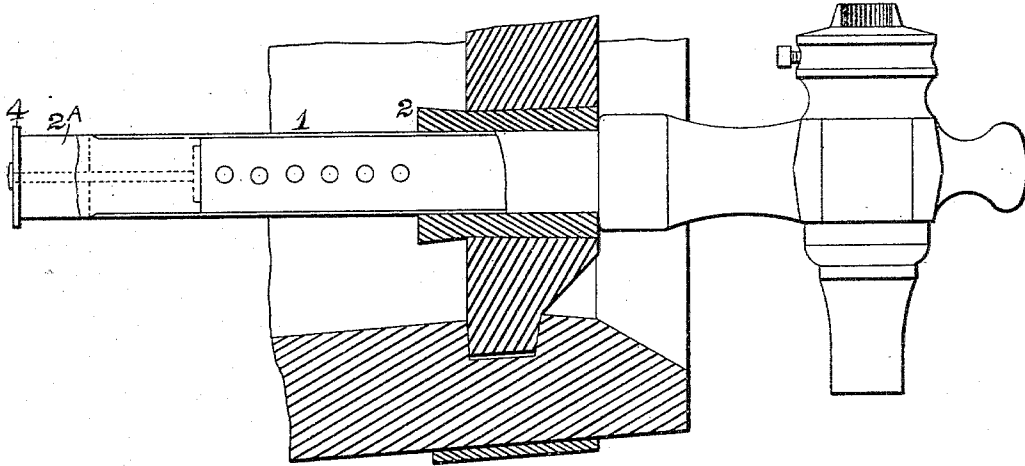


Fig. 4.

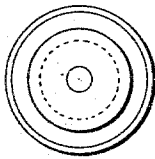


Fig. 2.

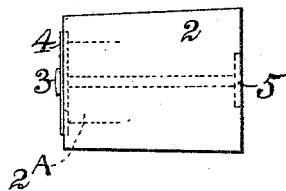


Fig. 3.

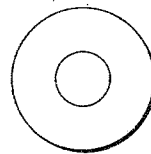


Fig. 6.

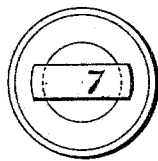


Fig. 5.

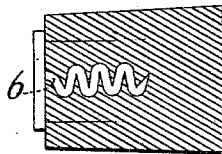
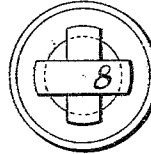


Fig. 7.



Witnesses:

H. W. Gough
J. H. Gough.

Inventor:

Henry Walter Rice

UNITED STATES PATENT OFFICE.

HENRY WALTER RICE, OF NOTTINGHAM, ENGLAND.

TAPPING CASKS, &c.

SPECIFICATION forming part of Letters Patent No. 515,377, dated August 27, 1895.

Application filed February 20, 1895. Serial No. 539,105. (No model.)

To all whom it may concern:

Be it known that I, HENRY WALTER RICE, lace manufacturer, a subject of the Queen of Great Britain, residing at 7 Magdala Road, Nottingham, England, have invented certain new and useful Improvements in or Connected with the Tapping of Casks or other Receptacles, of which the following is a specification, reference being had to the accompanying drawings.

In the accompanying drawings, Figure 1 is a side view of one of the taps employed with the stem in section. Fig. 2 is a side view of a cork for closing a cask or receptacle. Fig. 3 is an outer end view of the cork, and Fig. 4 an inner end view. Fig. 5 is a longitudinal sectional view of a closing-cork provided with a corkscrew in the inner end, and Figs. 6 and 7 show the inner ends of corks with corkscrews having a bar and a cross for the handles.

The tap employed may be of brass, bell-metal, or wood; but instead of having a brass or wood stem the stem 1 shown at Fig. 1 is formed of a thin steel tube with a cutting-edge at the end and perforated at the sides.

The cork employed to close each cask or receptacle has a wire 3 (shown at Fig. 2) passed through it, provided at the end within the cask with a disk or washer of metal 4, the end of the wire 3 being passed through and riveted on it. The disk or washer is slightly larger in diameter than the cutting-edge of the stem of the tap used. The outer end of the wire 3 forms or is provided with a disk of metal 5, slightly smaller than the interior diameter of the cutting edged stem of the tap.

Previous to inserting the wire and securing the disks 4 and 5 in position, the smaller end of the cork is cut to the depth shown by the dotted lines 2^a by a cutting-tube the same diameter as the top to be used. It may then be used to close a cask or other receptacle; or instead of the wire and disks being inserted in a closing-cork, a short corkscrew 6 is inserted in the cork, as shown at Fig. 5, the back end of the corkscrew terminating in a handle. The handle may be formed by a bar 7, longer than the diameter of the cutting edge of the tap, as shown at Fig. 6, or by a cross 8, as shown at Fig. 7.

The wire and disks or washers, and the

corkscrews and handles may be made of silver, or other suitable metal plated or galvanized.

When a cask or other receptacle is to be tapped, the cutting-edge of the top stem is pressed upon the outer end of the cork around the small outer disk or upon the center of the cork when a corkscrew is in it and forced through the cork, carrying a cylinder of cork and the wire and disks or washers or the corkscrew with it. Each closing-cork is cut to the depth shown at 2^a, Figs. 1 and 2, in order to prevent the inner end of the cork being bulged out or broken off when the top stem is being forced through. As the stem cuts its way to or near to the previously cut part, it breaks the cylinder around and carries it and the previously cut part in one piece to the position shown at Fig. 1, the greater portion of the cylinder resting in the cutter-stem. Then when the cask or other receptacle is empty upon the tap being withdrawn the cylinder or cork will be drawn into the stopping-cork, fill it, and remain there, being prevented from being drawn out by the disk or washer or by the handle of the corkscrew, and thus prevent the cask or other receptacle from becoming sour or musty.

What I claim is—

1. The combination with a cask or similar receptacle, of a stopper for the cask, said stopper being provided with a disk at its inner end, and a cylindrical tap of smaller diameter than the stopper and disk, and having a cutting edge at one end, said tap when forced upon the stopper serving to cut its passage therethrough, the cut portion remaining in the end of the tap and so arranged that when the tap is withdrawn the portion of the stopper carried by the tap will fill the opening in the portion remaining in the cask and thereby close the latter, substantially as described.

2. In a closing device for the discharge opening of casks and the like, the combination with a suitable tap passing through said discharge opening, perforations arranged upon the inner portion of the tap, a stopper carried by the inner end of the tap, and a plate of larger diameter than the tap, and secured to one end of the stopper, and adapted when the tap is withdrawn to abut against the inner

sides of the cask whereby the stopper is pulled from the tap and closes the discharge-opening, substantially as described.

3. The combination with a stopper having
5 a cylindrical cut in one end thereof and extending partially through the same, of a disk or plate secured to one end of the stopper, and covering the cylindrical cut, said disk or plate being of larger diameter than the cut,

and of smaller diameter than the stopper, substantially as described.

In testimony whereof I have hereunto set my hand this 5th day of February, 1895.

HENRY WALTER RICE.

Witnesses:

H. W. GOUGH,

J. H. GOUGH.