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W. S. BUCKLEY ET AL

VENT PEG

Filed Sept. 8, 1923

Fig. 1.

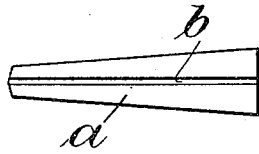


Fig. 2.

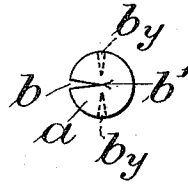


Fig. 3.

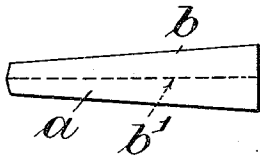


Fig. 4.

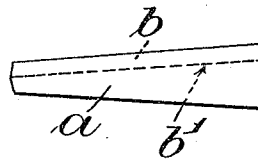
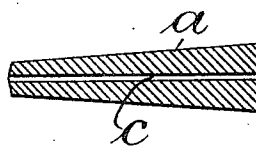


Fig. 5.



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UNITED STATES PATENT OFFICE.

WALTER STEELE BUCKLEY AND GORDON WOODHEAD BUCKLEY, OF MIRFIELD,
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VENT PEG.

Application filed September 8, 1923. Serial No. 661,589.

To all whom it may concern:

Be it known that we, WALTER STEELE BUCKLEY and GORDON WOODHEAD BUCKLEY, both subjects of King George V of Great Britain, and both residing at Mirfield, in the county of York, England, have invented a new and useful Improvement in or Relating to Vent Pegs, of which the following is a specification:

The invention relates to vent pegs employed to close vent holes in the bungs of casks or containers.

It is desirable frequently to permit of the escape of gases which may be evolved from liquid within the container and to this end vent pegs have been made from porous wood.

Owing to variations in the porosity of the wood from which the pegs have been made it has been difficult to ensure that a peg, when inserted, would permit of the escape of gases at the required rate and it has been almost impossible to gradually reduce the porosity or rate of escape as is requisite.

The invention has for its object, therefore, to provide a vent peg which will always ensure, on first insertion, a gas escape passage of definite and ample area, and which, by simple driving in of the peg will permit of the escape area being reduced as desired and, if necessary will permit of the escape passage being completely closed and thus dispense with the use of a non-porous or hard wood peg which has hitherto been required to seal the cask or container if and when gases are not being, or cease to be, evolved.

According to the invention an ordinary tapered vent peg of hard or non-porous wood or of an equivalent non-porous and sufficiently compressible and yielding material is provided with a longitudinal slot or slots of such depth, or an axial passage of such diameter, that when the peg is driven into the vent hole sufficiently far to ensure its retention, an ample air or gas passage is accorded. If the peg be driven further and further into the hole, the resulting compression causes the slot or slots or the axial passage to be gradually closed and the effective passage area to be gradually reduced until finally, if the peg be

driven in sufficiently far, the slot or slots or passage is or are completely closed and the vent hole is sealed.

In the accompanying drawing:—

Figs. 1 and 2 are, respectively, a plan view and an end view of a vent peg embodying the invention in one form;

Fig. 3 is a side view of a peg in which the base of the slot is parallel to the axis of the peg;

Fig. 4 is a side view of an alternative form of peg in which the base of the slot is parallel to the exterior surface of the peg; and

Fig. 5 is a longitudinal section of an alternative form of peg in which an axial passage is substituted for a slot in the surface of the peg.

In the drawing, *a* represents a peg of hard or non-porous wood or of an equivalent non-porous and sufficiently compressible material, tapered longitudinally from end to end in the usual manner.

According to the embodiment of the invention illustrated in the Figures 1 to 4, the peg *a* is formed from end to end with a slot *b*. This slot *b* is shown as being of V shape and as extending to the axial line of the peg. Obviously it might be of even width throughout its depth and it might not extend so deep as to reach the axial line, or it might extend beyond the axial line.

The slot *b* is shown further in Fig. 3 as having its base *b'* parallel to the axis of the peg but it might be made, as shown in Fig. 4, with its base parallel to the exterior surface of the peg, or the base of the slot might lie at some other angle. For convenience in manufacture it is preferred that the base of the slot be parallel to the axis of the peg. If the base of the groove be made parallel to the exterior surface of the peg as in Fig. 4, or lie at some other angle, the cost of production would be increased.

If a peg formed as above described be driven into a vent hole of appropriate diameter sufficiently far only to ensure its retention, the slot *b* will afford a passage of ample area for the escape of gases, and no danger will be run, as when employing a so-called porous peg, of the gases not being permitted to escape sufficiently quickly, or

at all. Further driving in of the peg will cause the slot to be gradually closed and the escape area reduced until finally if the peg be driven in sufficiently far the slot will be completely closed and the container sealed.

Although the peg has been described as having only one longitudinal slot *b* it will be obvious that two or more slots spaced apart circumferentially may be provided, as indicated in dotted lines at *b_y*, *b_y*, in Fig. 2. In this case, of course, the slots will not be made deep enough to reach the axial line of the peg, for the greater portion of its length at any rate.

As an alternative to slotting the exterior surface of the peg, an opening or bore *c* may be made axially through the peg as shewn in Fig. 5. This, if the wood or other material of which the peg is composed be sufficiently compressible, will enable the object of the invention to be attained, but for practical reasons the exterior slotting is preferred.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:—

1. A tapering vent peg formed of compressible material and provided with a collapsible gas escape passage extending

through it continuously and in a straight line from one end to the other.

2. A tapering vent peg formed of compressible material and provided with a collapsible gas escape slot extending along one side of it continuously and in a straight line from one end of it to the other.

3. A tapering vent peg formed of compressible material and provided with a collapsible gas escape slot extending along one side of it continuously and in a straight line from one end of it to the other, the bottom of the said slot being formed parallel to the axis of the peg.

4. A tapering vent peg formed of compressible material and provided with a collapsible gas escape slot V-shaped in cross-section and extending along one side of it continuously from one end of it to the other.

5. A tapering vent peg formed of compressible material and provided with a collapsible gas escape passage comprising a series of slots spaced apart around the peg and extending along it continuously from one end to the other.

In testimony whereof we affix our signatures.

WALTER STEELE BUCKLEY.
GORDON WOODHEAD BUCKLEY.