

(No Model.)

F. GAUTZSCH.

SPILE OR TEST TUBE FOR CASKS OR VATS.

No. 301,354.

Patented July 1, 1884.

Fig. 1.

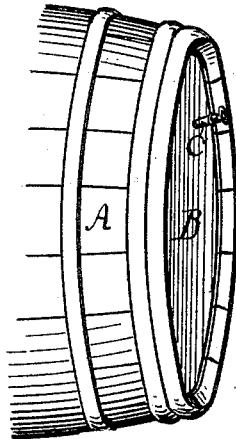


Fig. 2.

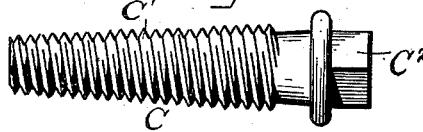


Fig. 3.



Fig. 4.



Fig. 5.

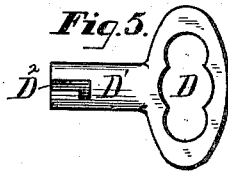


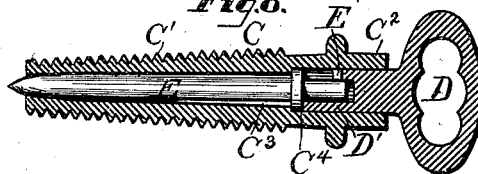
Fig. 6.



Fig. 7.



Fig. 8.



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SPILE OR TEST-TUBE FOR CASKS OR VATS.

SPECIFICATION forming part of Letters Patent No. 301,354, dated July 1, 1884.

Application filed April 21, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRITZ GAUTZSCH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Spile or Test-Tubes for Casks and Vats; and I do hereby declare the following to be a sufficiently full, clear, and exact description thereof as to enable others skilled in the art to make and use the said invention.

This invention relates to tubes for drawing small quantities of liquors from vessels for the purpose of testing the condition thereof and observing the progress of fermentation; and it has for its object the facility of drawing small quantities without waste and with the least risk of the tube becoming obstructed by any solid matter floating in the cask, at the same time making the apparatus self-cleaning, with less cost of material and labor than has been heretofore done.

The nature of this invention consists in a tapering tube having a screw-thread formed on its surface from the smaller end to within a short distance of the larger end, and made prismatic at its larger end, so as to adapt it to fit a wrench, whereby it may be rotated, and having a tapering bore fitted with a tapering plug extending even with, or projecting slightly beyond, the smaller end of the tube, at which point the plug is fluid-tight in the bore of the tube, and which said plug extends toward the larger end of the tube into a chamber, where it is provided with a projection or projections adapted to engage in a notched key similar to a bayonet-clasp, whereby the plug can be withdrawn or replaced.

I will now proceed to particularly describe the mode of making and using this invention, referring in so doing to the drawings annexed and the letters of reference marked thereon.

Figure 1 shows the head or end of a vessel for storing and fermenting beer, with this invention applied; Fig. 2, a horizontal view of the tube; Fig. 3, a horizontal view of the plug; Fig. 4, an end view of the plug; Fig. 5, a horizontal view of the key; Fig. 6, an end view of the key; Fig. 7, a cross-section of a

modified form of the plug and key, and Fig. 8 a horizontal section of the entire apparatus with the key applied.

The same letters of reference apply to the same parts in the several figures.

A represents a storage and fermenting vessel; B, the head thereof; C, a tapering tube made, preferably, of brass, and provided with a screw-thread on the tapering part, marked C', a prismatic head, C'', adapted to fit a wrench whereby it may be screwed into the cask-head

B. The interior or bore C³ of the tube C is tapering from the smaller end toward the part marked C', where it is chambered out into a cylindric form, into which chamber the exterior of a key-barrel, D', of the key D fits.

In the bore C³ of the tube C is fitted a plug, E, so as to be fluid-tight therein at the smaller end, and is of such length that the larger end of the plug E is entirely within or covered by the chamber C', when the small end of the plug E is pressed home into the tube C.

On the head of the plug E is formed a projection, E', which fits in an angular notch, D², in the barrel of the key D, resembling the device known as a "bayonet-clasp." As shown in Fig. 7, the projection E' is made in duplicate on opposite sides of the head of the plug E, as are also the angular notches D² in the barrel D' of the key D. This latter form is stronger than that with the single projection and notch. By means of the key D, engaging the projections E' on the plug E in the notch D², the plug E can be turned in the tube C and withdrawn or replaced; and by reason of filling the entire length of the tube C no solid particles can settle and incrust in the tube C, so that upon withdrawing the plug E the fluid that is in the body of the cask A immediately flows out for inspection and test, instead of stagnant fluid contained in the channel or tubes of cocks that have hitherto been used for the purpose, and the necessity heretofore experienced of wasting a considerable amount of liquor before procuring a fair sample from the body of the cask is avoided.

Having described my invention and the mode of using the same, what I claim is—

A spile or test-tube for casks, consisting of

a conical screw-threaded tube provided with a head or wrench-seat, whereby it may be turned, and a chamber or cavity for the reception of a key, in combination with a tapering plug fitting in said tube, so as to close the smaller end thereof, and having a head with projections adapted to engage in a key,

for retracting and replacing the plug in the tube, substantially as and for the purpose set forth.

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Witnesses:

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