

(No Model.)

G. GABB.
BROACHING DEVICE FOR CASKS.

No. 478,852.

Patented July 12, 1892.

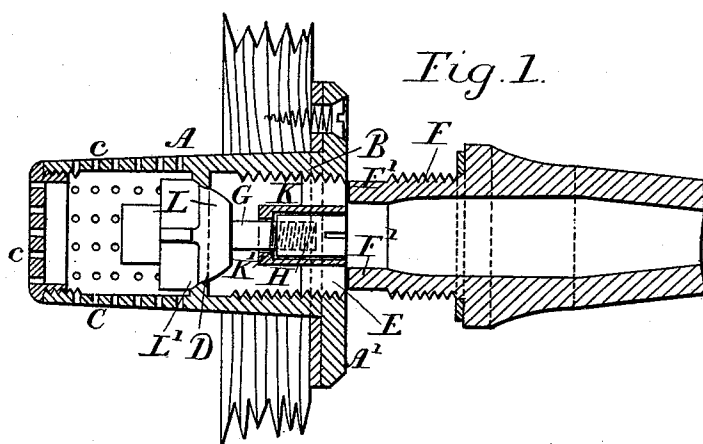
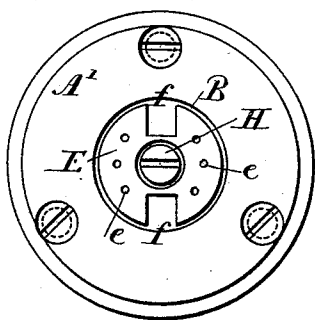


Fig. 2.



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UNITED STATES PATENT OFFICE.

GEORGE GABB, OF LONDON, ENGLAND.

BROACHING DEVICE FOR CASKS.

SPECIFICATION forming part of Letters Patent No. 478,852, dated July 12, 1892.

Application filed February 1, 1892. Serial No. 419,955. (No model.) Patented in France January 29, 1892, No. 219,007; in Belgium February 4, 1892, No. 98,216, and in Canada May 7, 1892, No. 38,864.

To all whom it may concern:

Be it known that I, GEORGE GABB, wine merchant, a subject of the Queen of Great Britain, residing at Wimbledon, London, in the county of Surrey, England, have invented new and useful Broaching Devices for Casks, (for which I have obtained patents in France, dated January 29, 1892, No. 219,007; in Belgium, dated February 4, 1892, No. 98,216, and in Canada, dated May 7, 1892, No. 38,864, and have made application for patent in Great Britain, which patent when granted will bear date September 19, 1891, No. 15,926,) of which the following is a specification.

My invention is designed to improve the so-called "broaching-taps" now in use, in which a metallic cylinder permanently fixed in the head of the cask constitutes a lock to prevent issue of liquid from the cask until the tap by its insertion acts as a key to open the outlet.

The invention may be thus briefly described:

In the head of the cask is sunk, usually flush therewith, a plate or flange carrying a short thimble or cylinder which projects into the cask and has about its middle the seat of a valve opening inward. Behind the valve-seat the thimble is perforated with a number of small holes to allow of the admission into it of the fluid contained in the cask. The front part of the thimble is internally screw-threaded to receive a correspondingly-screwed disk, and also to receive the screwed end of the tap when inserted. This disk has formed in it openings to receive corresponding projections from the end of the tap, and is further perforated to allow of the passage of liquid through it. The screwing of the tap into the thimble causes the disk to revolve, screwing it back until it pushes the valve off its seat, allowing the liquid to flow to the tap.

For full comprehension of the invention reference must be had to the annexed drawings, forming part of this specification, in which—

Figure 1 is a longitudinal section of the thimble in place with the end of the tap ready to enter; Fig. 2, a front view of the thimble.

A is the thimble, and A' its flange sunk flush into the head of the cask. This thimble is formed with a front part B, internally screw-threaded, and a rear part C, perforated, as shown at *c c*. Between these parts is a valve-seat D.

E is a circular disk screwed on its periphery to fit into the part B, perforated, as shown at *e e*, and provided with slots *f* for the reception of projections *F'* from the screwed end *F* of the tap, which is screw-threaded to enter B.

G is the valve-spindle, having screwed on its front end a cap H, with a left-handed screw-thread. The spindle G passes through the center of the disk E and of a sleeve K behind it and forming part of it, which has a shoulder at *K'* to form a stop for the cap H.

L is the valve, formed, preferably, with radial guides *L'*. When the tap is out, the valve L is drawn up against its seat by the unscrewing of the disk E, the shoulder *K'* acting on the cap H to draw forward the valve-spindle G; but on screwing in the tap, its projections *F'* being engaged in the openings of the disk E, this disk is screwed back and forces the valve L off its seat, leaving the passage open for liquid to flow to the tap. The withdrawal of the tap by screwing forward the disk E automatically closes the valve.

Having thus described the nature of my invention and the best means I know for carrying the same into practical effect, I claim—

1. The combination, with a thimble A, having a valve-seat D, a perforated part in rear of the valve-seat and a screw-threaded part in front of the latter, of a valve L, having a stem G, a disk E, screwed into the thimble, having slots *f* and a sleeve K and loosely engaging the valve-stem, so that when the disk is screwed outward the valve-stem and valve are drawn forward to seat the valve, and a tap having a screw-threaded portion *F* and pro-

vided with projections F' to enter the slots in the disk for screwing the latter inward and outward, substantially as described.

2. The combination, with a thimble A, having a valve-seat D, a perforated part in rear of the valve-seat and a screw-thread in front of the latter, of a valve L, having a stem G, a disk E, screwed into the thimble and having a sleeve K, and a cap H, arranged in the sleeve, adapted to bear against a portion thereof and secured to the valve-stem, so that when the disk is screwed outward the valve-stem and valve are drawn forward to seat the valve, substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 19th day of January, A. D. 1892.

GEORGE GABB.

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