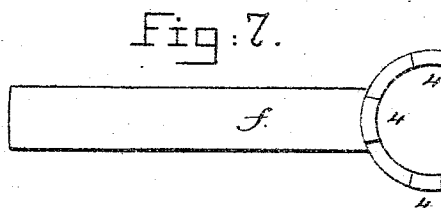
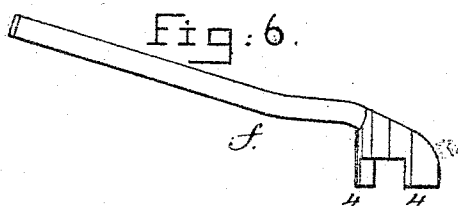
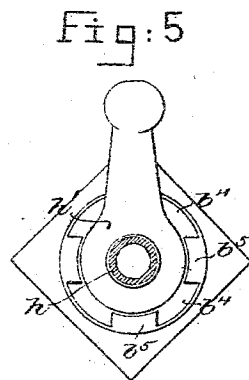
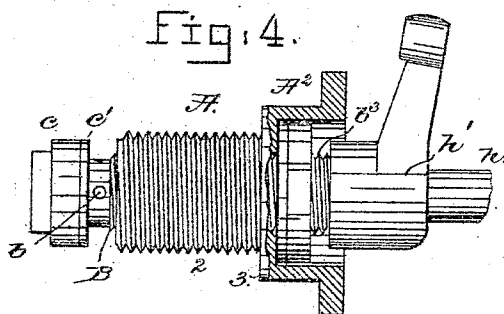
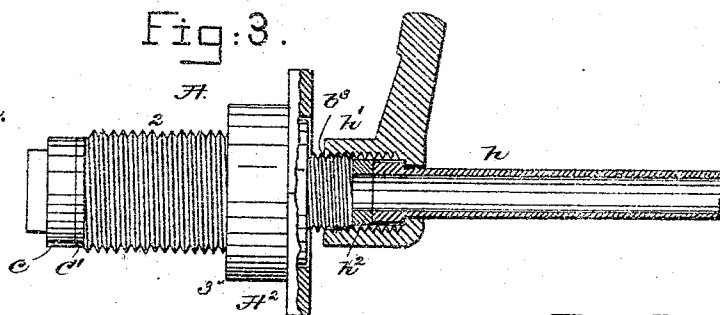
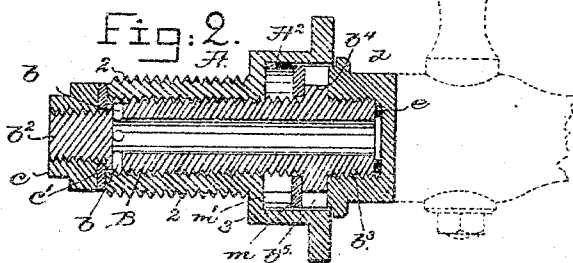
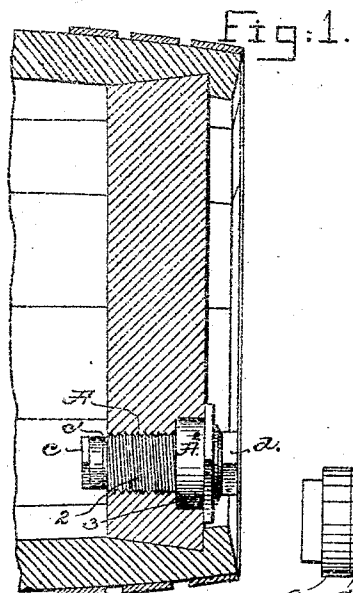


(No Model.)

T. O'BRIEN.
BARREL CONNECTION.

No. 321,520.

Patented July 7, 1885.



Witnesses.
Henry Marsh.
B. J. Hayes.

Inventor.
Timothy O'Brien
Grooby & Gregory Attys.

UNITED STATES PATENT OFFICE.

TIMOTHY O'BRIEN, OF BOSTON, MASS., ASSIGNOR OF ONE-HALF TO DAVID A. MURRAY AND JAMES CROWLEY, BOTH OF SAME PLACE.

BARREL-CONNECTION.

SPECIFICATION forming part of Letters Patent No. 321,520, dated July 7, 1885.

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

To all whom it may concern:

Be it known that I, TIMOTHY O'BRIEN, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Barrel-Connections, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The object of this invention is to provide barrels for beer or other liquors with a connection which shall secure the retention of the contents of the barrel after the same has been filled and until it is to be used, and which will then permit the ready attachment thereunto of a pipe or faucet without loss of liquor or gas.

In accordance with my invention, I have provided the head of the barrel with a headed bushing, screw-threaded externally for insertion in the barrel and internally for the reception of a flanged plug threaded externally at one end to enter the bushing, and at the other end, at the opposite side of a flange thereon, with another thread to receive a pipe-coupling or faucet, the said flange being shaped to be engaged by a wrench, the flange entering an enlarged chambered head in the outer end of the bushing, as will be described. Longitudinal movement of the plug into the barrel effects the uncovering of ports in the plug which permit the outward flow of the liquid, and a similar but reverse movement of the plug effects the covering of the parts for cutting off the outflow of the liquid. The invention consists in the detail of construction hereinafter set forth and claimed.

Figure 1, in section, shows one end of a barrel with my improved connection applied and in position to retain the contents of the barrel. Fig. 2, in full lines, but on a larger scale, represents a longitudinal section of the connection. Fig. 1. Fig. 3 shows the cap removed and a coupling of a pipe partially turned upon the plug preparatory to engaging the flange of the plug by the wrench to be described. Fig. 4 shows the plug after it has been moved longitudinally backward in the bushing; Fig. 5, a front view of Fig. 4; and Figs. 6 and 7 are different views of the wrench.

The bushing A, threaded externally at 2 to enter the wood of the barrel-head, has an en-

larged chambered head, A², (see Fig. 2,) forming a shoulder, 3, for contact with the barrel-head. The bushing is threaded internally to receive the screw-threaded inner end of the hollow plug B, provided with ports *b* for the passage of fluid and gas. The plug at its inner end beyond the screw-threads, which engage the interior of the bushing, is reduced in diameter and provided with an extension, *b*², which is screw-threaded and receives upon it a leather or other packing washer, *c*, and a nut or collar, *c*, so that the longitudinal movement of the plug outward in the bushing will cause the ports *b* to be brought within the bushing and the packing against the end of the bushing, thus preventing the escape of fluid, and in such condition, as shown in Figs. 1 and 2 in full line, the cap *d* will be screwed upon the screw-threaded outer end, *b*³, of the plug at the right of the flange *b*⁴, the said cap closing the outer end of the plug closely, a washer, *e*, being preferably used in the cap. The flange *b*⁴ is provided with a series of notches, *b*⁵, for the reception of the prongs 4 of a wrench, *f*. A filled barrel with the bushing stopped, as in Fig. 1, having been removed from the brewery, and it being desired to use the liquid therein, the cap *d* will first be removed. If the liquid is beer, and is to be taken out through a long pipe and stationary faucets in another story, the end of the plug will be placed next the end of a pipe, *h*, having a loose coupling, *h*¹, provided with a handle and a packing, *h*², and the coupling will be turned upon the outer end of the plug until the parts are as in Fig. 3, when the wrench *f* will be applied outside the coupling, so that the prongs 4 will enter the hollow head A² and the notches *b*⁵ of the flange of the plug, after which the plug will be rotated by the said wrench and will be moved longitudinally into the bushing, removing the packing *c* from the inner end of the bushing, uncovering the ports *b*, such movement of the plug also causing the packing *m* to be forced against the seat *m*¹ and the coupling to be carried into the hollow head of the bushing, as in Fig. 4, crowding the packing *m* against the seat *m*¹.

In case it is desired to insert a faucet into the barrel, the faucet, provided at its inner end with a screw-thread to engage the threaded end

b^3 of the plug, may be applied to the latter, the cap d having been first removed. Fig. 2, by dotted line, shows part of a faucet in the position it will occupy. The enlarged head of the bushing is let into a recess in the barrel-head, which is nearly as thick as the bushing is long, and the bushing and plug are therefore confined within the chine.

I claim—

- 10 1. The bushing A, having the enlarged chambered head A^2 , and screw-threaded externally to enter the barrel, and also screw-threaded internally, combined with the longitudinally-movable screw-threaded plug B, fitting the
- 15 threaded interior of the bushing, and having the screw-threaded projection b^3 and cap d , all arranged to operate substantially as shown and described.

2. The screw-threaded hollow plug B, having the nut c , packing c' , and openings b at one end, and the flange b^4 , packing m , and screw-threaded projection b^3 at the other end, combined with the internally-screw-threaded bushing A, having the chambered head A^2 , and the screw-cap d , substantially as and for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

TIMOTHY O'BRIEN.

Witnesses:

G. W. GREGORY,
B. J. NOYES.