No. 653,034. Patented July 3, 1900.

H. NADORFF.

TAPPING DEVICE.

(Application filed Apr. 5, 1900.)

(No Model.)

Fig. 1.

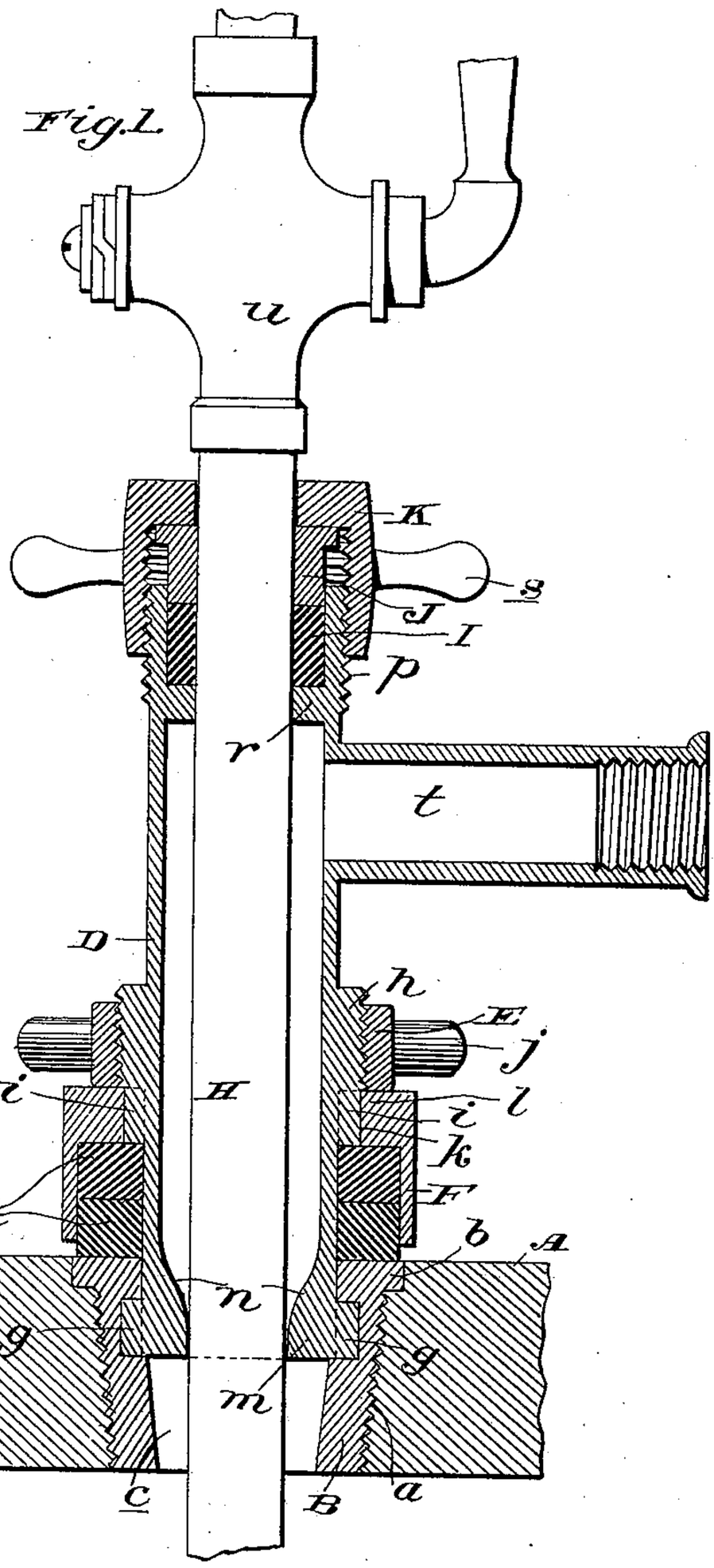


Fig. 2.

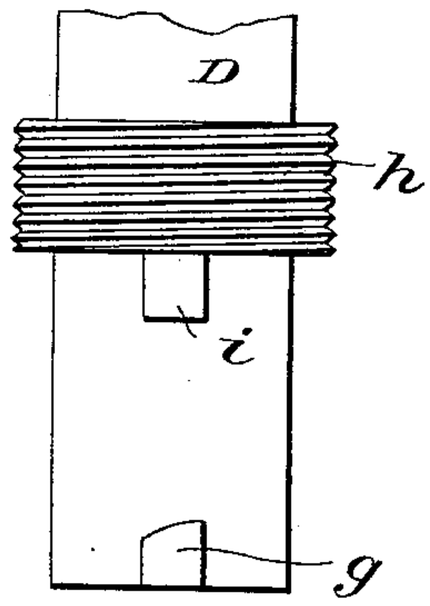


Fig. 3.

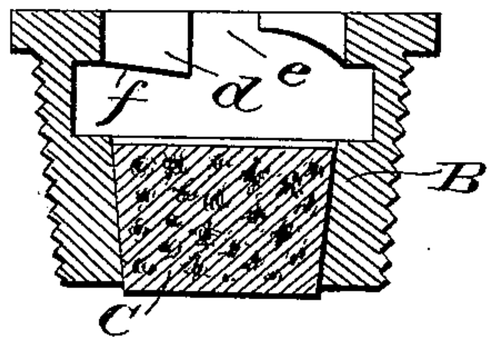


Fig. 4.

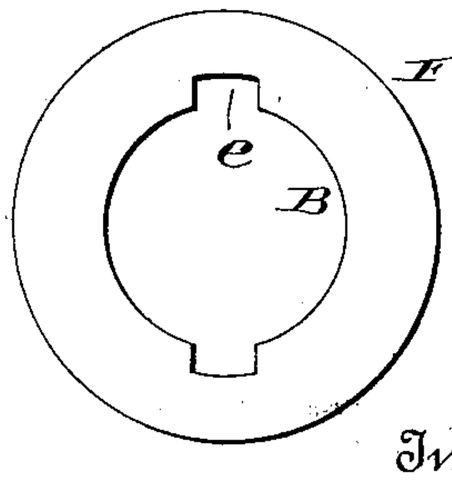
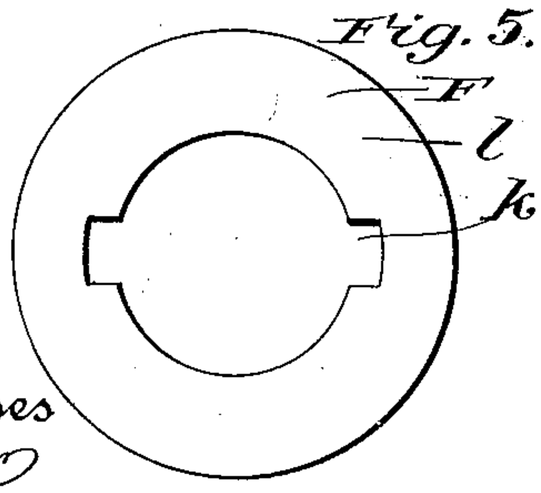


Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

HENRY NADORFF, OF LOUISVILLE, KENTUCKY.

TAPPING DEVICE.

SPECIFICATION forming part of Letters Patent No. 653,034, dated July 3, 1900.

Application filed April 5, 1900. Serial No. 11,703. (No model.)

To all whom it may concern:

Be it known that I, HENRY NADORFF, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented new and useful Improvements in Tapping Devices, of which the following is a specification.

My invention relates to improvements in devices for tapping barrels of beer and other beverages; and it consists in the peculiar and advantageous tapping device hereinafter described, and particularly pointed out in the claims appended.

In the accompanying drawings, Figure 1 is a sectional view illustrating my improved tapping device as connected to a beer-barrel. Fig. 2 is a detail elevation of the lower portion of the sleeve-section of the device. Fig. 3 is a diametrical section illustrating the bushing which I prefer to employ in conjunction with my improved device and the bung therein. Fig. 4 is a plan view of said bushing. Fig. 5 is a top plan view of the endwise-movable housing forming part of my improved device.

In the said drawings similar letters designate corresponding parts in all of the several views, referring to which—

A is the head of a beer or other barrel provided with a tapered bung-hole *a*, and B is the bushing which I prefer to employ in the said hole. Said bushing is exteriorly tapered and threaded and at its outer end has an exterior flange *b*, designed to limit its inward movement. It also has an inwardly-tapered bore *c*, designed to receive a tapered bung C, preferably of cork, and at its outer end is provided with an inwardly-directed flange *d*, said flange having grooves *e* in its inner edge at opposite points and also having two oppositely-disposed inclined planes *f* at its inner side, each of which has its beginning at one of the grooves *e*, as shown.

D is the sleeve-section of my improved device, which is formed in one piece, as shown in Fig. 1. This sleeve-section is provided at its inner end with two diametrically-opposite lugs *g*, which are beveled at their upper sides and are designed to pass through the grooves *e* and engage the inclined planes *f* of the bushing B after the manner shown in Fig. 1. The sleeve-section is also provided at about the distance illustrated with a peripherally-threaded circular enlargement *h* and below said enlargement with two diametrically-opposite lugs *i*. The enlargement *h* is designed for the engagement of an interiorly-threaded ring or annulus E, having handles *j* at opposite points, while the lugs *i* are designed to rest in grooves or notches *k* in the inner edge of the inwardly-directed flange *l* at the upper end of a circular metallic housing F. The said housing is designed to contain two (more or less) packing-rings G, of rubber or other yielding material, which surround the sleeve-section below the flange *l* of the housing and are interposed between the said flange *l* and the face or outer end of the bushing B, as shown. By reason of this construction it will be seen that after the lugs *g* at the inner end of the sleeve-section D are passed through the grooves *e* of bushing B and said sleeve-section is turned to connect it to said bushing the joint between the sleeve-section and bushing may be expeditiously rendered liquid and air tight by simply turning the ring or annulus E down on the threaded enlargement *h* of the sleeve-section. When the ring or annulus is thus turned down on the sleeve-section, the housing F will be moved downwardly and the rubber gaskets G will be tightly compressed between the flange *l* and the face or outer end of the bushing for the purpose stated. Incident to its downward and upward movements the housing G is securely held against turning or rotary movement, and hence it will be seen that there is absolutely no friction between the housing and gaskets, with the result that the usefulness of the latter is materially prolonged, which is an important advantage. It will also be observed that the housing incloses the gaskets or rubber rings, and thereby protects the same against the deteriorating action of dirt or other foreign substance.

At the lower end of the sleeve-section D of my improved device an inwardly-directed circular flange *m* is provided, said flange being designed to snugly receive a draft-tube H and having its upper side beveled, as indicated by *n*, so as to guide the tube through the lower end of the sleeve-section when said tube is forced downwardly to displace the bung in the bushing B and tap the barrel. At its up-

per end the sleeve-section D is exteriorly threaded, as indicated by *p*, and adjacent to its upper end it is provided with an apertured diaphragm *r*. Said diaphragm is designed to receive the draft-tube H and hold it in the longitudinal center of the sleeve-section and is also designed to support an annulus I, of rubber or other packing material, which surrounds the draft-tube, as shown.

J is a ring or annulus which surrounds the draft-tube and rests in the upper end of the sleeve-section and on the packing-ring I, and K is a cap-nut which is interiorly threaded to engage the upper end of the sleeve-section and apertured to receive the draft-tube and is provided, by preference, with suitable handles *s*, as shown. By virtue of this construction it will be observed that when the cap K is turned down on the upper end of the sleeve-section D the packing-ring I will be compressed between the metallic annulus J and diaphragm *r*, and hence crowded against the draft-tube, and it will also be observed that this compression and crowding of the packing-ring is effected without said ring contacting with or being cut or otherwise deteriorated by the threads of the cap-nut K.

In addition to the features before named the sleeve-section D is provided with the usual lateral arm *t*, designed to be connected with an air or gas supply, and the draft-tube H is provided with the cock *u*, common in the art.

In using my improved device to tap a barrel of beer the sleeve-section D is connected to the bung-bushing B in the manner before described and the ring E is turned down on said sleeve-section to compress the packing-rings G, and thereby render the joint perfectly tight. The tube H is then moved down until its lower end bears against the bung C and is then struck by a mallet and driven downwardly until the bung C is forced out of the bushing and into the barrel. After the tap is effected and the beer-pipe connected to the cock *u* said cock is opened.

I prefer to provide the flanges *d* of the bushing B with inclined planes *f*, and also prefer to bevel the lugs *g* on the sleeve-section D after the manner before described. I do not desire, however, to be understood as confining myself to such construction, as when desired the lower sides of the flanges *d* may be horizontal and the upper sides of the lugs *g* may be square without departing from the scope of my invention.

Having thus described my invention, what I claim is—

1. In a tapping device, the combination with a bushing adapted to be fixed in the bung-hole of a barrel and hold a bung; said bushing having an inwardly-directed flange provided in its inner edge with one or more grooves; of a sleeve-section having one or more lugs *g* at its inner end adapted to engage the flange of the bushing, and also having exterior threads at an intermediate point of its length, and one or more lugs *i* between said threads and its inner end, one or more packing-rings surrounding the sleeve-section between the lugs *i* and *g*, the circular housing surrounding the packing-rings and sleeve-section and having the inwardly-directed flange at its outer end provided in its inner edge with one or more grooves receiving the lug or lugs *i* of the sleeve-section, and an interiorly-threaded ring or annulus surrounding the exteriorly-threaded portion of the sleeve-section and bearing on the outer end of the housing, substantially as specified.

2. In a tapping device, the combination of a bushing adapted to be fixed in the bung-hole of a barrel and hold a bung; said bushing having an inwardly-directed flange provided in its inner edge with grooves, a sleeve-section having lugs *g* at its inner end adapted to engage the flange of the bushing, exterior threads at an intermediate point of its length, and lugs *i* between said threads and its inner end, and also having exterior threads at its outer end and an apertured diaphragm adjacent to said outer end, one or more packing-rings surrounding the sleeve-section between the lugs *i* and *g*, the circular housing surrounding the packing-rings and sleeve-section and having its inwardly-directed flange at its outer end provided in its inner edge with grooves receiving the lugs *i* of the sleeve-section, an interiorly-threaded ring or annulus surrounding the exteriorly-threaded intermediate portion of the sleeve-section and bearing on the outer end of the housing, a draft-tube extending through the apertured diaphragm of the sleeve-section, a packing-ring of compressible material arranged in said diaphragm and surrounding the draft-tube, an annulus J surrounding the draft-tube above the packing-ring, and an interiorly-threaded cap-nut screwed on the outer end of the sleeve-section and having an aperture receiving the draft-tube, substantially as specified.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY NADORFF.

Witnesses:
CARL POHLER,
HENRY NADORFF, Jr.