(No Model.)

G. F. HILDENBRAND.

VALVE AND SPIGOT WRENCH FOR BARRELS.

No. 290,183. Patented Dec. 11, 1883.

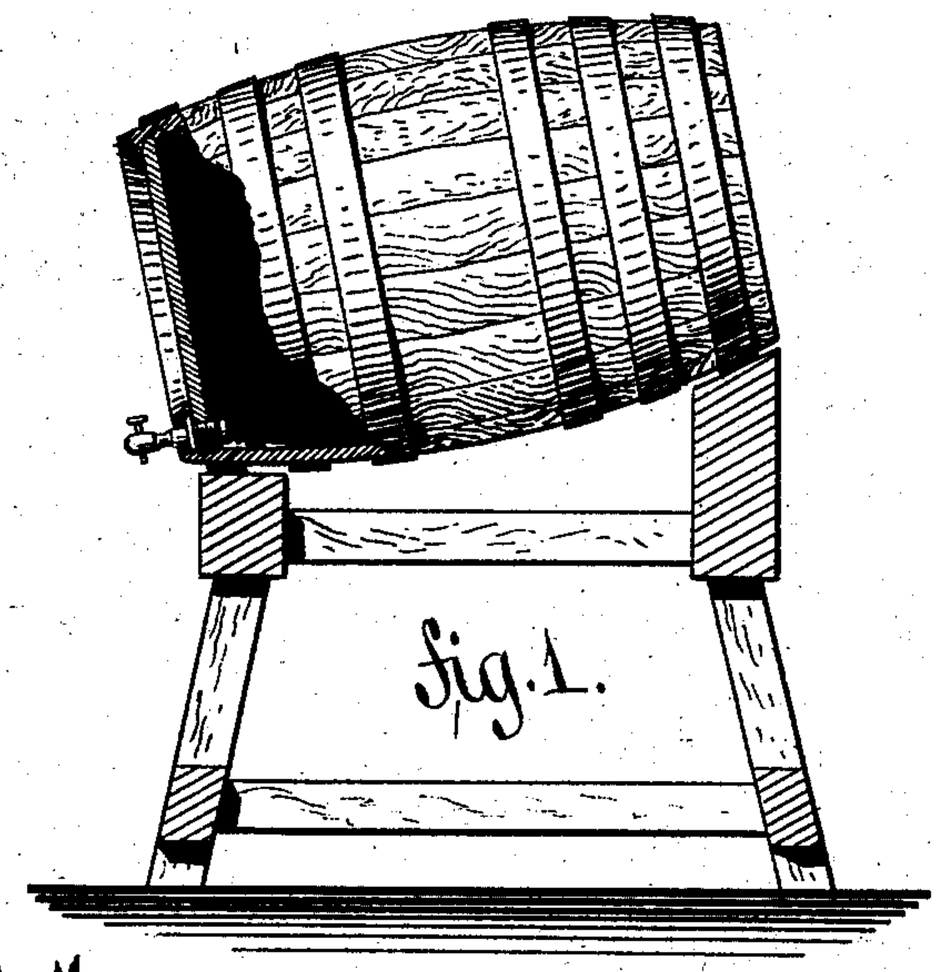

Fig. 1.

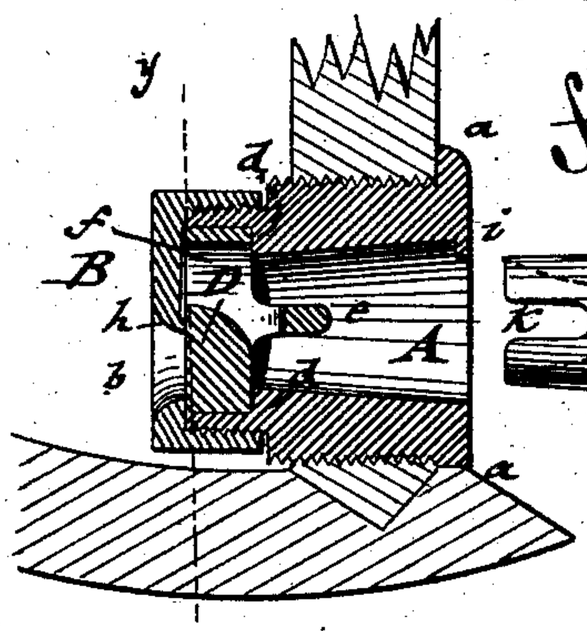

Fig. 2.

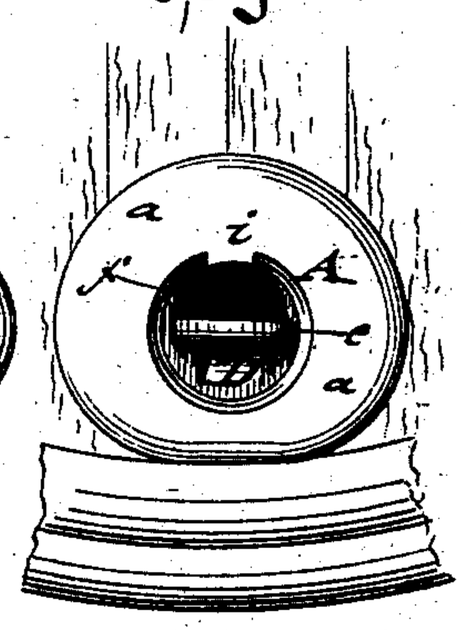

Fig. 4.

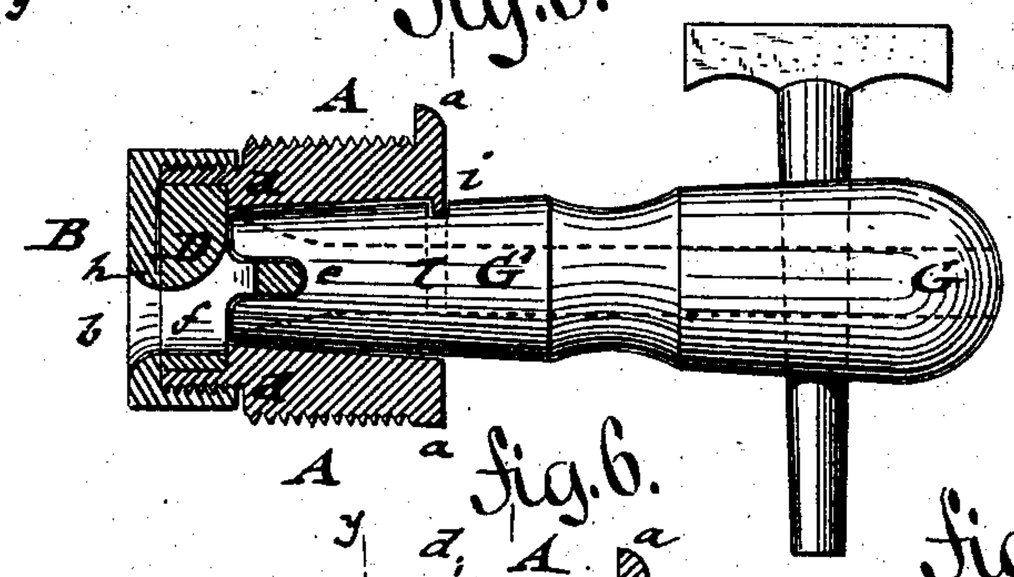

Fig. 3.

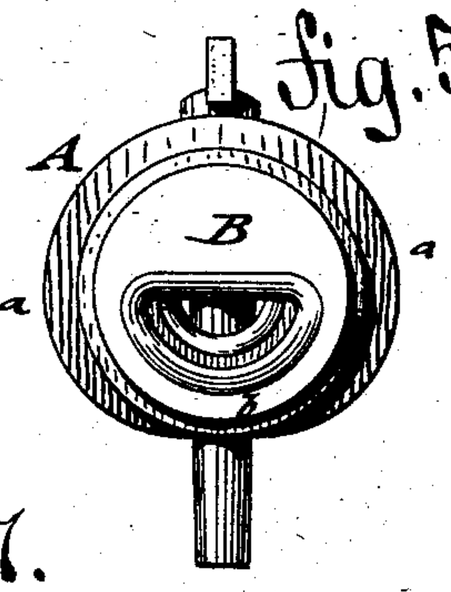

Fig. 5.

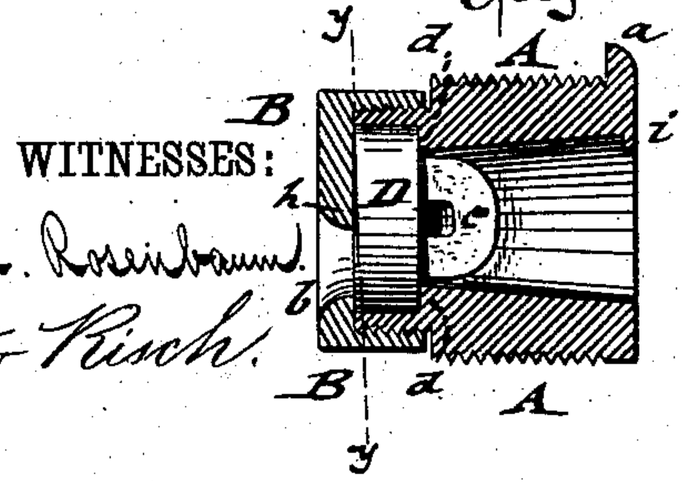

Fig. 6.

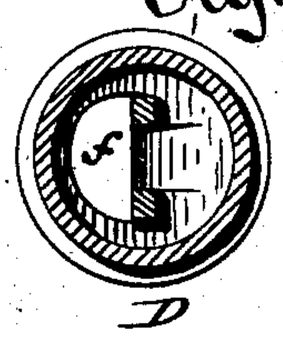

Fig. 7.

WITNESSES:

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INVENTOR

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UNITED STATES PATENT OFFICE.

GEORGE F. HILDENBRAND, OF NEW YORK, N. Y., ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO CHARLES L. GROSS, OF SAME PLACE.

VALVE AND SPIGOT WRENCH FOR BARRELS.

SPECIFICATION forming part of Letters Patent No. 290,183, dated December 11, 1883.

Application filed October 9, 1882. Renewed September 18, 1883. (No model.)

To all whom it may concern:

Be it known that I, GEORGE F. HILDENBRAND, of the city, county, and State of New York, have invented certain new and useful Improvements in Faucet-Hole Attachments for Barrels, of which the following is a specification.

Faucet-hole attachments for kegs or barrels have been used heretofore with a view to dispense with the cork or other plugs by which the faucet-holes are closed. These attachments had the disadvantages that they were either too complicated and expensive, or that they contained springs, packings, or other parts which were liable to wear out and render the attachments unfit for use.

This invention has reference to an improved faucet-hole attachment for kegs or barrels, in which fermented liquors are shipped; and the invention consists of a bushing that is screwed into the faucet-hole of the head of the keg or barrel, and provided with a retaining screw-cap, and a disk-valve interposed between a shoulder of the bushing and the screw-cap, which latter are both provided with openings. The disk-valve can be set so that the openings register with each other or close the bushing by means of a faucet, the inner end of which is adapted to engage and turn the disk-valve. The face of the screw-cap has a raised seat, with which the slightly-beveled or inclined rear face of the disk-valve forms contact, so as to cause the intimate and tight closing of the disk-valve when the same is turned, so that that their openings are out of register. The wrench-faucet is guided into its proper position, so as to engage the disk-valve, by a projecting stud of the bushing, which stud passes along a longitudinal side recess and a transverse segmental guide-recess of the barrel of the faucet, as will appear more fully hereinafter, and finally be pointed out in the claims.

In the accompanying drawings, Figure 1 represents a sectional side elevation of a keg with my improved faucet-hole attachment shown as applied for use. Figs. 2 and 3 are vertical longitudinal sections of the attachment, showing it respectively in closed and in open position, and with the faucet in position to open the attachment, and after it has been opened. Fig. 4 is a front view; Fig. 5, a rear view of the same. Fig. 6 is a horizontal section of the attachment, and Fig. 7 a sectional view of the disk-valve.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents a bushing with an exterior screw-thread and a front shoulder or flange, *a*. This bushing is screwed into the faucet-hole of the keg or barrel. This may be accomplished by a pipe-wrench applied to the flange *a*, or, if the shape of the flange is made polygonal, by an ordinary wrench.

To the inner end of the bushing A is screwed a cap, B, having an opening, *b*, while between the cap and an interior shoulder, *d*, of said bushing A is interposed a disk-valve, D, having an opening, *f*, which corresponds in size and form to the opening *b* of the cap. At the inner face of the screw-cap B, around the opening *b*, is arranged a raised seat, *h*, which seat is inclined. The face of the disk-valve D, next to the screw-cap B, has a corresponding bevel or inclination, as indicated by dotted lines *y y* in Figs. 2 and 6. The object of the slightly-beveled seat *h* and inclined face of the disk-valve is to close the opening *b* of the screw-cap tightly and reliably when the valve is turned into such a position that its opening *f* does not register with the opening *b* of the screw-cap. On turning the valve it becomes wedged in its place, while on turning it in a contrary direction, so that the openings register with each other, the valve moves easily between the guide-shoulder *d* and cap B, and admits the free passage of the liquid from the interior of the keg to the outside.

The disk-valve D is provided with a stud or other means, *e*, as shown in Figs. 2, 3, and 6, by which the correspondingly-recessed end of the barrel G′ of a faucet, G, can engage the same, so as to admit the turning of the disk-valve in either direction. The barrel G′ of the faucet G is fitted into the opening of the bushing A, so as to turn freely therein with the valve.

The other parts of the faucet are the same as in the ordinary faucets in general use.

To guide the faucet into the proper position for engaging and turning the disk-valve D, the bushing A is cast or otherwise provided at its front part with a small inwardly-projecting stud or lip, *i*. The barrel G′ of the faucet G is provided with a longitudinal side recess, *g*, along which the stud or lip *i* moves when the faucet is inserted into the bushing A. The recess *k*, at the end of the barrel G′, and the side recess, *g*, are so arranged relatively to each other that on the introductton of the faucet into the bushing the latter is moved along the projecting lip or stud *i*, while the former engages the projection *e* of the disk-valve D. In this position of the faucet the disk-valve D is out of register with the opening of the interior screw-cap, B, so that the faucet attachment is tightly closed. After the faucet G has been introduced into the bushing, it is turned through an angle of one hundred and eighty degrees, during which motion the lip *i* is guided along a transverse segmental recess, *l*, of the barrel G′, said recess communicating at one end with the side recess, *g*, as shown clearly in Fig. 2. The ends of the recess *l* serve as stops for the axial motion of the faucet, the recess being of such length as to set the disk-valve D in position, so that its opening registers exactly with the opening of the screw-cap B. The contents of the keg or barrel can thus be drawn off through the faucet.

By locating the opening *b* of the screw-cap B at the lower part of the faucet attachment, the contents of the keg can be drawn off almost entirely.

As the faucet-hole attachment is a permanent fixture of the barrel, it can be located immediately adjoining the side staves thereof, which is not possible in the present kegs, as the faucet-hole and plug must of necessity be at some distance from the staves.

I am aware that faucet-hole attachments for kegs and barrels, in which a bushing of the faucet-hole with a sleeve fitted thereto and provided with an opening, the disk-valve having a corresponding opening, which parts are so arranged that the openings may be placed in or out of register to permit the passage or stop the flow of liquid through the same, have been used heretofore, and I therefore do not claim such a combination, broadly.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the bushing A, of an interior screw-cap, B, having opening *b* and an inclined valve-seat, *h*, a disk-valve, D, having opening *f*, and an inclined face that is so arranged relatively to the seat that the valve becomes tightened on being closed, substantially as specified.

2. In a faucet-hole attachment, the combination of the bushing A, having an inwardly-projecting lip or stud, *i*, with a faucet, G, the barrel of which is provided with a longitudinal side recess, *g*, and a transverse segmental guide-recess *l*, substantially as described.

3. The combination of the bushing A, having guide stud or lip *i*, screw-cap B, having opening *b*, disk-valve D, having opening *f* and projection *e*, and faucet G G′, having an end recess, *k*, longitudinal side recess, *g*, and lateral guide-recess *l*, 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.

G. F. HILDENBRAND.

Witnesses:
HARRY DRURY,
HARRY SMITH.