F. MESSMER.

FAUCETS.

No. 190,350. Patented May 1, 1877.

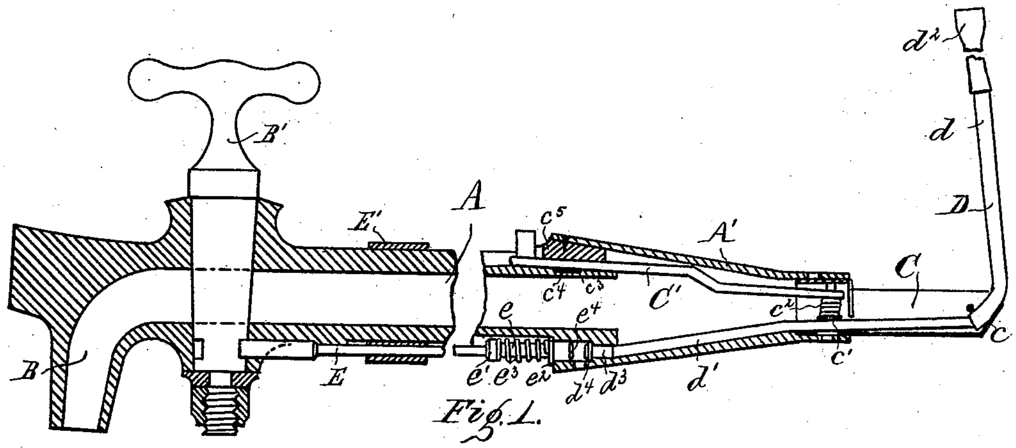

Fig. 1.

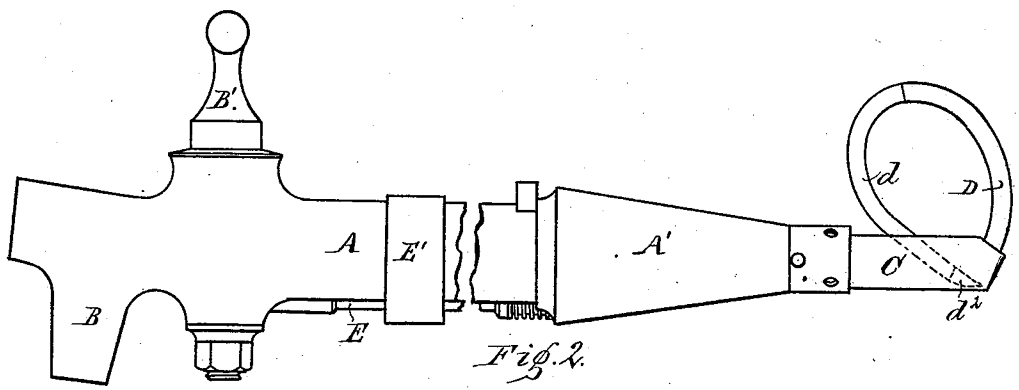

Fig. 2.

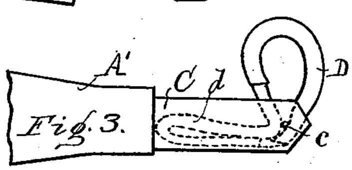

Fig. 3.

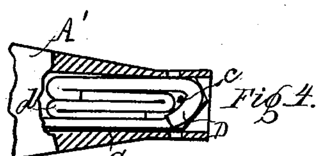

Fig. 4.

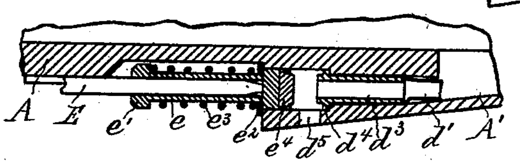

Fig. 5.

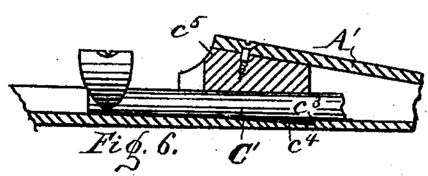

Fig. 6.

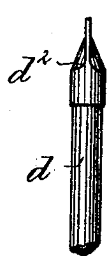

Fig. 7.

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UNITED STATES PATENT OFFICE.

FERDINAND MESSMER, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN FAUCETS.

Specification forming part of Letters Patent No. **190,350**, dated May 1, 1877; application filed July 5, 1876.

To all whom it may concern:

Be it known that I, FERDINAND MESSMER, of St. Louis, in the county of St. Louis and State of Missouri, have invented an Improved Beer-Faucet, of which the following is a specification:

The object of this invention is specially to improve, in certain important features, the patents for faucets issued to me, bearing date respectively June 23, 1874, and March 2, 1875, and being numbered, the former 152,397, and the latter 160,275.

The improvements alluded to relate to a novel construction of parts, by means whereof the hose can be folded in a better manner to facilitate its insertion into the shank, as well as made to insure a ready self-disengagement out of the shank, and float to the top within the keg; also, my invention relates to the construction and parts used to form the needed joint where the rod of the slide passes in and out of the shank; further, it relates to an improved manner of connecting the end of the hose to the air-vent, and the construction of parts to control said air-vent; lastly, to certain detail parts, all of which will now more fully appear.

Of the drawing, Figure 1 is a sectional elevation, indicating also the position of the hose when within the keg. Fig. 2 is a side elevation of the faucet, as if out of the keg, and showing the first fold of the hose when same is to be packed in its slide. Figs. 3 and 4 are respective details, showing the further manner of folding the hose, also its folded condition in the slide. Fig. 5 is a sectional elevation, showing the parts that control the air-vent. Fig. 6 is a sectional detail, showing the joint-packing for the rod that actuates the slide. Fig. 7 is a detail of valve on hose.

A is the faucet; A′, the shank; B, the discharge; B′, the key.

In my patents above alluded to the hose which supplies air to the keg is wound round a stem. I find the coiling of the hose too objectionable, as the expansive tendency of the hose makes it difficult to push the hose and its parts in and out of the shank; also, the coiling of the hose prevents it assuming that straight condition necessary to carry the float top of the liquid, and otherwise the hose becomes disabled, so as not properly to unwind from its stem. To obviate these disadvantages and results, I provide a slide into which the hose is folded, as will hereinafter appear.

The slide C is hollow, to form the receptacle. At c its outer end is inclined for a support to the hose. At c^1 a portion of the under face of said slide is inwardly raised to form a bearing, and otherwise the slide is made or cast to present the construction shown in Figs. 1, 2, 3, 4.

The rod C′ is attached to the slide, so as not to interfere with the hose. One end of the rod engages a pin, (which forms part of bearing c^1.) Around this pin is coiled a spring, c^2, (see Fig. 1,) the purpose of all which is to guide and keep in a horizontal plane the action of said rod, as well as preventing the outer end thereof from rising out of its channel in top of the faucet. As the rod is drawn to the left the spring rises and keeps the outer exposed part of the rod down in its grooved seat, and, consequently, as this rod is small and more in the nature of a stem, it is protected from rough usage by being thus kept in its grooved seat.

Where the rod C′ comes out of the shank, great difficulty was incurred in my former patents by my not being able to make a tight air-joint to prevent leakage, &c. To accomplish this object I form a seat and shoulder, as at c^3, (see Figs. 1 and 6,) the seat tapering in its bevel to receive a lower packing, c^4, which preferably should be of leather, in contradistinction to the upper packing c^5, which I form of cork. The shoulder at c^3 is to retain the lower packing in its seat. In this wise the needed joint for the rod is practically achieved without interfering with the free movements thereof. D is the hose. This is securely held in place at c by a pin. (See Fig. 1.) This portion of the hose is of a stronger, thicker, and more stiff quality than its remaining sections, so as to be capable of assuming as much as possible a perpendicular position when in the keg. To both ends of this thickened section the remaining sections, such as d and d^1, are properly secured, the former to carry the valve, and the latter to establish air-vent. The valve d^2 consists of rubber, its ends flattened and brought together, (see

Figs. 1 and 7,) so that said ends will open to pass the air in the keg, and close when no air is to be admitted. The self-closing of this valve prevents the liquid from filling the hose.

The hose d^1 is passed under and through the bearing at c^1 of the slide, and has its extreme end to the left connected to a tube, d^3, which has a shoulder, d^4, to bear against a similar shoulder in the shank, which latter shoulder gives a firm back for the valve to press against in closing this end of the hose.

The air-vent d^5 is controlled as in my former patents, viz: by the turning of the cock a rod, E, is actuated to shut off or open said vent. The new structural features now provided consist in a hollow sleeve, *e*, at the end of the moving rod. This sleeve has a shoulder at e^1 and loose washer e^2, between which a coil-spring, e^3, is provided. Further, the end of the sleeve *e* is hollowed out to form a socket-bearing for packing e^4, all of which is shown more clearly in Fig. 5. In case, therefore, the rod E is actuated to close the vent, it causes the sleeve *e* to slide forward until it closes the air-aperture, and by its packing closes the end of the hose, at the same time contracting the spring, so that on releasing the rod the spring assumes its original position, and assists to restore the parts.

In my former patents the rod E came in contact with the frame of the ice box or stand, preventing the opening of the vent when desired. I provide a loose collar, E′, fitted to slide along the barrel of the faucet, and as the rod passes through this collar, it has therefore an afforded bearing, as well as protection to perform its free movements.

The operation of my improved parts, briefly stated, is as follows: The slide being out, first put the end of hose into the bottom of slide, the tip or valve at the farthest end, (see Fig. 2;) next fold up the remaining part of the hose in the slide, as shown in Fig. 3, so that it forms four folds, as in Fig. 4; then put slide back in the faucet, and drive it into the keg, as usual. This done, the slide is pushed out again, whereupon the elastic hose jumps up and takes its proper position. The rod E works forward or backward by the turning of the key, and by means of the spring, and opens or shuts the air-vent at the same time with the opening or closing of the outlet for the beer.

What I claim is—

1. The shoulder c^3, upper and lower packing c^4 c^5, rod C′, in combination with faucet A, as and for the purpose set forth.

2. The rod C′, coiled spring c^2, bearing c^1, slide C, faucet shank A′, combined to operate as and for the purpose set forth.

3. The combination of a hollow slide, C, rubber hose D, faucet shank A′, by means whereof the folding of the hose in the slide is accomplished, in the manner described and shown, as and for the purposes set forth.

4. The combination of a hollow slide, C, hose D, rod C′, and faucet A, to operate in the manner shown, and for the purpose set forth.

5. The tube d^3, having shoulder d^4, in combination with hose D and faucet A, having valve e^4, as and for the purpose set forth.

6. The sleeve *e*, its shoulder e^1, washer e^2, spring e^3, packing e^4, in combination with rod E and faucet A, as and for the purpose set forth.

7. The rod E, its sleeve *e*, having shoulder e^1, washer e^2, packing e^4, spring e^3, the sleeve d^3, its shoulder d^4, hose D, all said parts being in combination with a faucet, A, having vent d^5, to operate as and for the purposes set forth.

8. The sliding collar E′, rod E, and faucet A, as and for the purposes set forth.

In testimony of said invention I have hereunto set my hand.

FERDINAND MESSMER.

Witnesses:

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