C. F. WRAY.

FAUCET.

APPLICATION FILED FEB. 9, 1916.

1,267,489.

Patented May 28, 1918.

Fig. 1

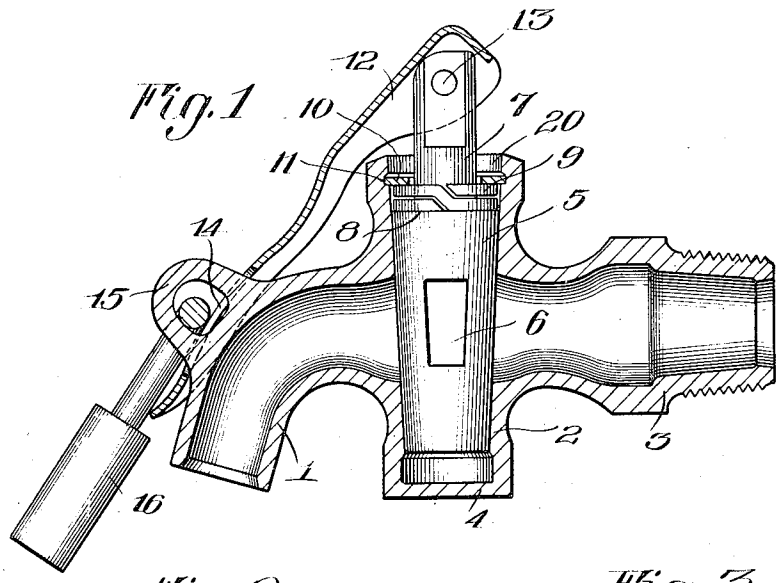


Fig. 2

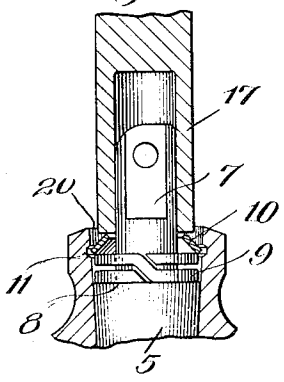


Fig. 3

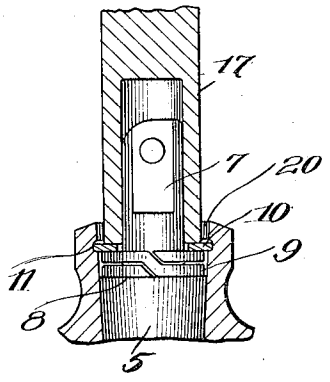
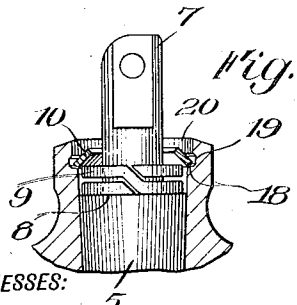


Fig. 4



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FAUCET.

1,267,489. Specification of Letters Patent. Patented May 28, 1918.

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To all whom it may concern:

Be it known that I, CHARLES F. WRAY, of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Faucets; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the reference-numerals marked thereon.

My invention has for its object to provide a faucet so characterized as to make it particularly adapted for use on tanks and the like, or in any relation where it is desirable to so lock the parts as to prevent a valve from being moved and effectually obviate the possibility of anyone unauthorized gaining access to the contents of a tank or container without breaking or destroying the faucet. A further purpose of the improvement resides in so constructing the parts as to greatly simplify their assembling, and also to reduce the cost of manufacture by comparison with the faucet shown in my prior Patent No. 1,099,077, issued June 2, 1914, and upon which this invention is an improvement. To these and other ends the invention consists in certain improvements and combinations of parts all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:

Figure 1 is a sectional view showing the application of my invention to a faucet of the locking handle type;

Fig. 2 is a detail view showing the method of assembling, and more specifically, the initial position of the valve retaining means or locking plate with a stamping plunger located for engagement with it;

Fig. 3 is a similar view illustrating the position of the parts after the plunger has descended, to force the locking member or plate into retaining relation with the valve, and

Fig. 4 is a sectional view of a slightly modified form of my invention.

Similar reference numerals in the several figures indicate the same parts.

The present embodiment of the invention embraces a faucet embodying a spout or discharge 1, a valve body 2, and a threaded portion 3 by which it may be attached to a tank, container, or to a pipe through which the fluid contents may be conducted. The valve body 2, it will be noted, has an integral closed bottom 4 so that there is no opportunity for an escape of liquid at the bottom of the body, the purpose of which will be more apparent presently. The valve, or plug, which is illustrated as of the rotary type, is designated by 5, being arranged within the valve body 2. The plug 5 is of the usual tapering formation, corresponding to the form of the valve body in which it is arranged, and is provided with an opening 6 through which the liquid contents pass to the discharge. The plug 5 carries a stem 7 at its upper end, which is of less diameter than the plug 5, the latter terminating in a shoulder 8. Located upon the shoulder 8 and around the stem 7 is a spring 9, which is engaged on its upper face by a retaining means in the form of a locking member or plate 10 surrounding the valve stem 7, and held in place by an integral overlying portion of the valve body. In the arrangement shown in the drawings, the outer edge of the retaining plate 10 is engaged with a groove or recess 11 in the valve body, the upper side of said groove affording a shoulder against which the plate 10 engages, and by which it is prevented from being removed. 12 is a handle pivotally held on the stem 7 by means of a pin 13. The outer end of the handle is provided with an opening 14 for engagement over an eye formed on the spout of the faucet, and when the valve is closed, and the handle moved into engagement with the eye 15 as shown in Fig. 1, a lock 16 may be employed to prevent the handle from being raised.

In Figs. 2 and 3, I have shown the method of assembling the parts whereby the plug retaining member or plate is brought into locking relation with the valve body. The plug 5 is first inserted into the valve body, and the spring 9 positioned on the shoulder 8 in the manner shown in Fig. 2, after which the locking member or plate 10 is placed around the stem 7, resting upon the spring 9. When in this position, that is when first inserted, the locking member 10 is in the form of a frustum of a cone, its outside diameter being sufficiently small to permit it to drop within the top opening of the valve body. When thus positioned, an annular

stamp or plunger 17 is brought down upon the inner edge of the locking member, as shown in Fig. 2, and continued movement of the plunger initially compresses the spring 9 and thereafter flattens the locking plate, as shown in Fig. 3, until its outer edge is forced and laterally expanded within the groove 11, against the outer wall thereof and so as to underlie the upper wall or shoulder of the groove. The locking member 10 is thus securely held in position, and serves to retain the valve plug and the spring, which latter is held in a state of compression and acts to yieldably maintain the valve plug in its proper operating relation.

In Fig. 4, I have illustrated a slightly modified form in which the outer edge of the locking plate 10, when in its initial position, rests upon a shoulder 18 formed on the valve body at the base of the groove 19, so that in the flattening operation, pressure is against the shoulder 18, instead of against the spring, as in the form previously described.

Faucets of this character are quite generally used on gasolene supply tanks where it is particularly desirable that locking means be employed so as to absolutely prevent unauthorized removal of the liquid contents, and this is fully accomplished by the present structure when the handle 12 is locked in the manner shown in Fig. 1. Under such conditions it is impossible to turn the valve plug, or to remove, or even adjust the plug retaining means, so that there is no conceivable manner in which the mechanism can be tampered with except by breaking or destroying some of the parts, which would give immediate knowledge of the fact. A certain amount of leakage necessarily occurs around a valve plug in a faucet of this type, and where the plug retaining means is at the bottom or lower part of the valve body, as in most cases, there is a continual drip of the fluid contents when the valve is closed. This is a disadvantage that is overcome in the present structure by reason of the fact that any leakage which occurs must pass upwardly around the plug, as the bottom 4 is entirely closed. Any such leakage is necessarily very slow, and the pocket 20 formed at the top of the valve body is sufficient to retain such a small amount of liquid, until it is completely evaporated, and evaporation will take place as fast as leakage occurs, without permitting any of the liquid to reach the outside of the valve body, or to drop onto the ground or floor.

By providing the plate 11 retaining the plug 5 and spring 6 in operative relation within the faucet body, as above described, I am able to dispense with some comparatively expensive parts shown and described in my aforesaid prior patent, said discarded parts being the inner cap screwed to the valve body and confining the spring, and the outer removable cap on the end of the plug stem and to which the plug actuating handle is pivoted. In the present invention the plug handle 12 is pivoted directly to the outer end of the plug stem 7, thus materially reducing the number of parts and greatly lessening the cost of manufacture without sacrificing efficiency and durability.

I claim as my invention:

1. The combination with a valve body and a plug therein having a stem, of means for retaining the plug in the body comprising a plate on the plug stem having greater lateral dimensions than the plug receiving opening of the body and lying in a groove therein providing a shoulder overhanging the plate, and expansible means between the plug and the plate normally seating the plug in the valve body.

2. The combination with a valve body and a plug therein having a stem, of means for retaining the plug in the body comprising a plate on the plug stem having greater lateral dimensions than the plug receiving opening of the body and lying in a groove therein providing a shoulder overhanging the plate, expansible means between the plug and the plate normally seating the plug in the valve body, an operating handle pivoted to the plug stem, an eye on the body adapted to enter an opening in the handle, and means engaging the eye while overlying the handle to lock the faucet closed.

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Witnesses:

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