

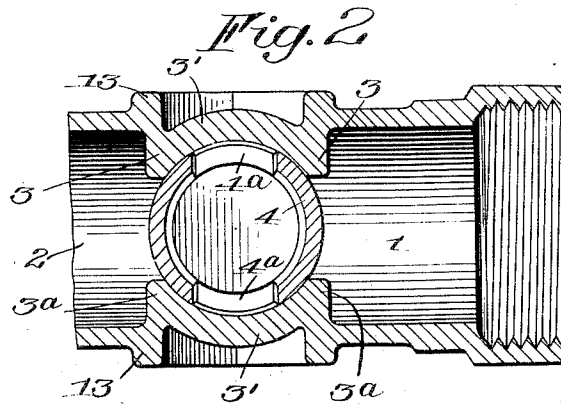
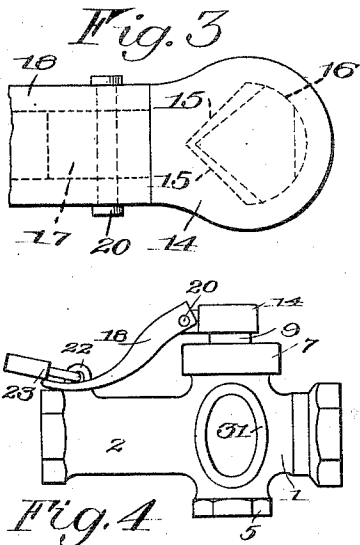
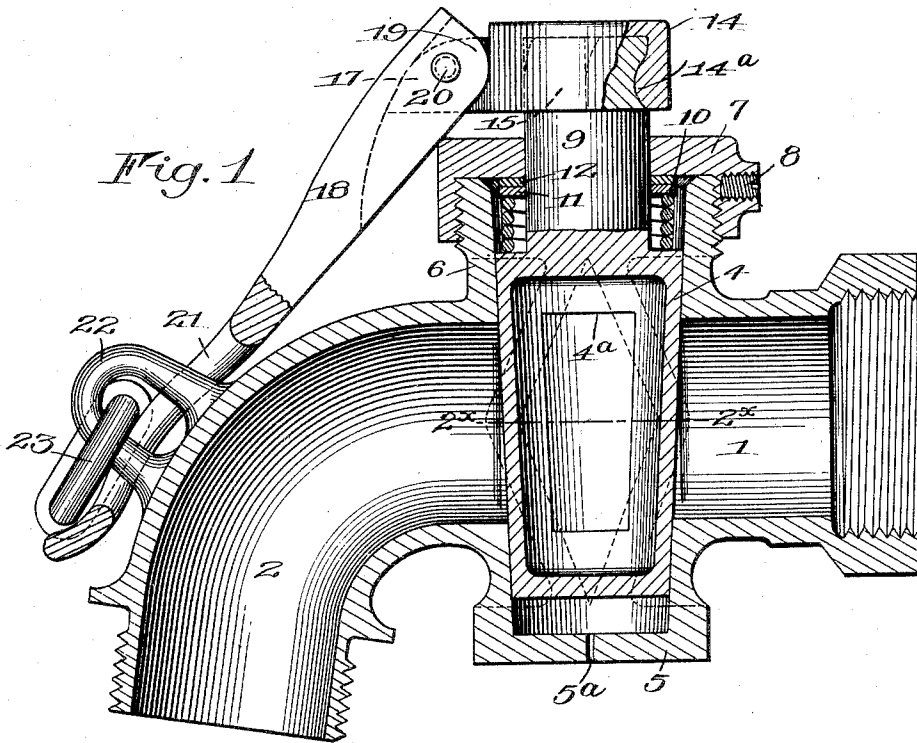
C. F. WRAY.

TANK FAUCET.

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TANK-FAUCET.

1,099,077.

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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 Tank-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 present invention has for its object to provide a new and improved type of faucet adapted particularly to be used on oil tank wagons or in other exposed places, the novel features of which reside in reinforcing the body in the vicinity of the valve seat and in providing a detachable handle which is also lockable and when locked is incapable of being removed and secures the valve head in closed position, all as will be described in the following specification and set forth particularly in the claims appended thereto.

In the drawings; Figure 1 is a longitudinal sectional view illustrating a faucet constructed in accordance with my present invention; Fig. 2 is a horizontal sectional view thereof taken on the line 2^x—2^x of Fig. 1, and Fig. 3 is a detail plan view showing part of the removable handle, and Fig. 4 is a view showing the invention applied to a stop cock.

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

In illustrating my present invention I have shown a faucet made of cast metal having the tubular body 1, the outer or discharge end 2 of which extends downwardly. Within the body and extending transversely thereof at opposite sides are ribs 3—3 and 3^a—3^a, which are spaced apart and embrace the intervening wall spaces, indicated by 3'—3' which are curved slightly both interiorly and exteriorly, their inner surfaces being machined and ground to form the valve seat. Coöperating with the latter is the valve plug 4, which is preferably hollow and is provided at its opposite sides with the rectangular apertures 4^a which, when the plug is rotated a quarter turn occupies the spaces between the ribs 3—3 and 3^a—3^a forming an open passage through the valve body. The lower end of the valve seat terminates in a boss 5, which is provided with a small perforation 5^a forming a vent below the plug, permitting the latter to be seated and when seated to work its way downwardly without

forming an air cushion beneath it. The upper end of the seat is surrounded by the boss or collar 6, threaded exteriorly and fitted with the cap or cover 7, which may be locked in place by a small set screw 8. The valve plug is provided with a stem or extension 9 of smaller diameter than the larger end of the plug so that the latter forms a shoulder thus providing an annular recess within the boss 6, to accommodate a coiled spring 10, which may be compressed more or less by the rotation of the cap 7. Interposed between the latter and the upper convolution of the spring is a ring 11, and a felt washer 12, for preventing the entrance of dust or other foreign material which may have a tendency to work its way through the aperture in the cap 7.

Valves of this nature, when used in exposed places, are frequently injured by blows accidentally received on one side or the other of the body, which tend to distort the valve seat and render it "out-of-true," in some instances making it impossible to rotate the valve or causing the latter to work with difficulty and causing it to leak, especially when the receptacle to which it is fitted contains gasoline or a similar volatile liquid. In order to obviate this difficulty and to strengthen the valve seat without adding materially to the weight of the body of the faucet, or the expense of manufacturing it, I provide on said body, at each side of the valve seat, exterior ribs 13. These preferably extend in opposite directions on divergent angles from the bosses 5 and 6 in lines crossing the ribs 3 and 3^a forming a diamond shaped figure, as shown in dotted lines in Fig. 1. With this arrangement of the ribs it will be seen that any blow delivered upon the side of the body will be received upon one or both of the ribs 13 and as these project beyond the weaker, or more frail wall parts 3'—3', these surfaces can only be reached by comparatively small objects and as these are not liable to enter the recesses between the ribs 13 these parts of the body are in reality better protected than would be the case were the spaces between the ribs made solid.

Another feature of my invention relates to the removable operating and locking handle, and consists in providing on the valve stem a removable cap 14, which is provided with an irregular recess, as shown in dotted lines in Fig. 3, adapted to receive a corre-

spondingly shaped projection on the valve stem 9, whereby said parts interlock to enable the valve plug to be rotated. While the shape of the recess and the cooperating end of the valve stem is immaterial, I prefer to construct them with two surfaces 15, diverging from each other and connected by a circular surface 16, as this arrangement prevents the application of any of the usual forms of wrenches and requires a special tool to be provided for rotating the valve plug. The forward edge of the cap 14 is provided with an ear or extension 17, to which is pivoted a handle 18 having on its under side a recess forming two ears 19, between which the projection 17 is received, these parts being pivotally connected by the rivet 20. The bottom of the recess and the upper edge of the projection 17 form cooperating stops or shoulders which limit the upward movement of the handle 18, so that the latter will be held horizontally when in operative position. At its outer end the handle is provided with a slot or aperture 21, adapted to fit over an eye or staple 22 cast integral with the body 1 of the faucet and adapted to receive the bolt or hasp of a padlock or other locking device 23. The handle 18 and the eye 22 cooperate when the handle is moved to the inoperative position so that the cap 14 cannot be removed from the valve stem 9 and since at such times the valve plug is in the position shown in Fig. 1, closing the outlet, it is also locked to prevent the unauthorized removal of the liquid contents of the receptacle to which the faucet is attached.

The removability of the cap 14 and its attached handle 18 renders the construction of the faucet shown particularly adaptable for use upon tank wagons, employed for distributing oil in retail quantities, as this business requires the operator to frequently leave the wagon for a short length of time, on which occasions it is neither convenient nor necessary for him to go to the trouble of applying the padlock 23, at such times he will merely remove the handle and cap from the valve stem, carrying these parts with him, and replacing them upon his return.

In order to prevent the handle from accidentally slipping off the valve stem, as it might tend to do especially when the valve plug is firmly seated and requires consider-

able effort to be expended to rotate it, I secure the cap 14 in place by an interlocking projection and recess 14^a on said cap and valve stem so arranged that the cap must be tilted upwardly at one edge to either attach or detach it.

The invention has been described as applied to faucets such as those employed upon tank wagons but it will be understood it is equally applicable to other types of faucets as will be seen from Fig. 4 in which I have illustrated a stop cock. In this view I have also shown the exterior reinforcing ribs 31 made oval in shape.

I claim as my invention.

1. In a faucet, the combination with a body having a valve seat and a valve plug cooperating therewith having an outwardly projecting end, of a cap fitting the latter, said cap and plug having cooperating projections interlocking by tilting the cap on the plug, of a handle pivoted to the cap, and interlocking portions on the handle and faucet body adapted to engage when the handle is turned down in inoperative position, said interlocking projections on the cap and plug and the interlocking portions on the handle and body all cooperating to prevent the removal of the cap from the valve plug.

2. In a faucet, the combination with a body having a valve seat and a valve plug cooperating therewith having an outwardly extending angular portion provided with an undercut portion at its rear side, of a cap having a correspondingly shaped angular recess fitting said end, a boss extending across the side of said recess and fitting the undercut portion of said end, a handle pivoted on the cap having a recess and an eye on the body fitting said recess when the handle is turned down and arranged to receive a lock to secure the handle in the inoperative position with the valve plug in closed position, said boss and handle when in locked position cooperating to prevent the removal of the cap and the boss and undercut portion further serving to prevent the accidental removal of the handle when the latter is unlocked.

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