

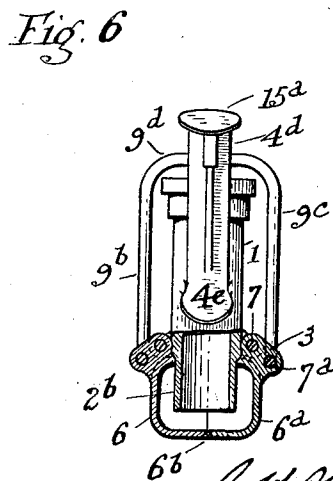
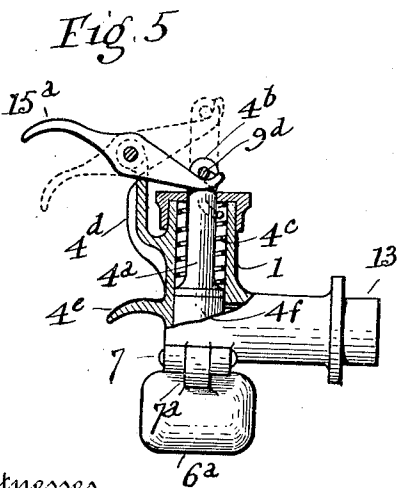
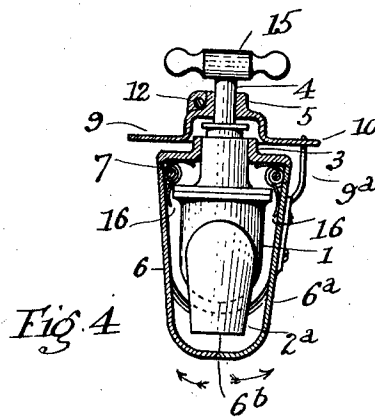
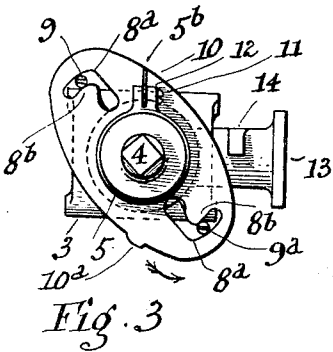
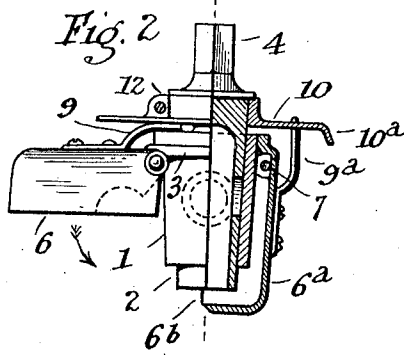
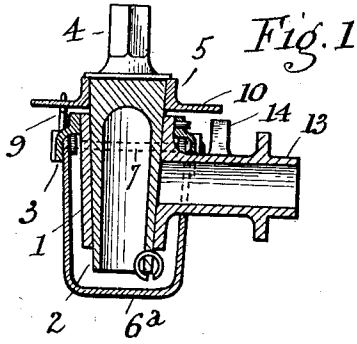
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FAUCET ATTACHMENT.

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Witnesses

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UNITED STATES PATENT OFFICE.

JOHN WELLS SHEPHARD AND FREDERICK AUGUSTUS JONES, OF WAGGA WAGGA, NEW SOUTH WALES, AUSTRALIA.

FAUCET ATTACHMENT.

1,058,637.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed March 12, 1912. Serial No. 683,388.

To all whom it may concern:

Be it known that we, JOHN WELLS SHEPHARD and FREDERICK AUGUSTUS JONES, subjects of the King of Great Britain and Ireland, &c., residing at Wagga Wagga, in the State of New South Wales, Commonwealth of Australia, have invented certain new and useful Improvements in or Attachable to Taps or Cocks; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Authorities having become alert as to the danger of milk, and of water, becoming unintentionally contaminated before reaching the consumer, we have given attention to tap construction, and thus have made this invention, which comprises improvements in or attachable to taps or cocks having external spout or nozzle guards or protectors to keep away dust and dirt, to prevent persons handling, or articles touching, the spout, and so on. Street and domestic water taps, and milk cart taps are some of those which are particularly liable to be fouled.

Our construction provides nozzle inclosing members or shields, connected to and operated from the upper part of the tap, so that where a tap plug has a hollow base as the outlet for liquid, this invention is applicable, though it is not restricted to hollow plug taps. We provide movable protective casing members or shields having supports on the tap body; each member will be opened by operating the tap handle to open the valve, and closed by a reverse action. The word door will be used hereinafter for brevity to indicate each such movable protecting member or shield, though these will in shape and detail vary according to the tap or the fancy of the maker. They will ordinarily be chambered or recessed to the better inclose the nozzle. One door alone may serve to shut in a nozzle, providing it be closed against a stationary backing to produce an inclosing chamber, but it is so frequently advantageous to use two doors, which will simultaneously open or close, that the latter construction is described hereinafter with reference to the accompanying drawings.

Figures 1 and 2 show respectively a side

and a front elevation partly sectional, of a tap of simple form and few parts, which can be easily taken to pieces and cleaned. In Fig. 2 one door is shown open. Fig. 3 is a plan of the tap in Fig. 1. Fig. 4 shows a sectional front elevation of a tap having a lift valve, or one operated by a screw plug as used mostly where there is a high pressure water supply. The nozzle is shown curved, but in the other figures it is shown as straight. Figs. 5 and 6 illustrate in side and front elevation, partly sectional, parts of a tap having a lift valve, the plug being raised as by leverage, its closing occurring as by spring pressure. In Fig. 5 dotted lines show the tap plug and handle in the raised position of the plug.

In Figs. 1, 2 and 3 of the drawings 1 is a tap body or casing inclosing a valve 2 which is hollow, and will be opened and closed by rotating a plug 4, which may have a detachable or a fixed handle. 13 is part of the tap body, having a passage to the valve. Any suitable platform, or flange 3 is attached to the tap body so as to form a stationary part, as the top, of the nozzle inclosing chamber which will be formed when the doors are shut. The doors marked 6, 6^a and meeting at 6^b, are hinged to or movable on supports, as pins or spindles 7 connected to the tap body or the platform 3.

Detachably or otherwise attached to the plug is door actuating means, as a plate 10. We may form it with a slot 5^b and collar 5 having apertured lugs 12 and tightening screw 11, so that the collar will grip the plug. From each door 6, 6^a a projection or horn 9 or 9^a extends normally upward and projects through suitably shaped slots in plate 10. The opposite sides of these slots which are shown curved and angular, are marked 8^a, 8^b, and when plug 4 with plate 10 is rotated, to open the valve as per arrow in Fig. 3, the slot sides 8^a will press the tops of the horns and by tilting the horns will swing the doors open. There may be a lug 10^a on plate 10 to meet a stop 14 on body 13 to limit the rotation of the said plate but the usual plug has already a sufficient stop. The said door opening action might carry the slots clear of the horn tops (see the left side of Fig. 2 which shows a horn no longer in a slot) but in that case, the horn top will again enter the slot when the motion of the plug is reversed, whereupon the

doors not only tend to close by gravity but the slot sides 8^b will by pressure on the horn tops restore the horns to normal positions, and so force the doors to close. In practice the slots and horns will be shaped and tested so as to work satisfactorily.

The small removable ring on the nozzle in Fig. 1 is not claimed. It is merely a means of holding the nozzle down. When a door is open as in Fig. 2 it cannot close until the plate is raised when the valve is closed because plate 10 does not allow room for horn 9 to swing upward. With the screw plug of Fig. 4 plate 10 will according to the turning of tap handle 15 after its level and we find it advisable to add springs as 16 which keep the doors open so long as plate 10 is raised. The latter may then be raised clear of the horns leaving the springs to hold the doors open and also keep the horn tops in their horizontal or equivalent positions, but the plate will on being lowered, again take the horn tops into its slots and so force the doors to close over the nozzle 2^a.

In Figs. 5 and 6, the plug stem 4^a with valve 4^f depressed by spring 4^e is to be lifted as by a lever handle 15^a, supported by an arm or bracket 4^a having a fulcrum for the said handle—and 4^e is a fixed trigger or finger hold projecting from the tap body. None of these parts are however claimed herein as novel.

The doors have pivots 7^a or suitable connections to horns 9^b, 9^c, which may be integral with a transversé head 9^a and the latter is connected to the tap plug, as by being engaged by a hooked top 4^b of the plug. Then as the plug is raised the doors will be swung open on their hinges 7 or the like. And when the plug descends, horns 9^b, 9^c will close the doors, or allow them to close. The construction is so arranged that a sufficient opening of the doors occurs before the opening of the valve, and a sufficient closing of the valve before the closing of the doors to prevent inconvenience to users, in all the forms of tap to which the invention is applied.

In Fig. 2 a recess is shown in dotted lines in the door 6 for closely fitting the tubular cap body 13.

An advantage of the movable collar 5, is that it may allow plug plate 10 to be adjusted, so as to more readily position the

slots which the horns are to engage. Distinct members, each to operate a horn, may take the place of a plate 10.

What we claim by United States Letters Patent is:—

1. In a tap protector, doors pivotally supported on the tap at a point above the nozzle and adapted to swing downwardly by gravity to comprise a nozzle-inclosing chamber, and means actuated by the tap for opening and closing said doors upon opening and closing of the tap.

2. In a tap protector, a nozzle-inclosing chamber comprising a plate above the nozzle, and doors movably attached to said plate adapted to be opened against gravity to free the nozzle.

3. In a tap protector, a nozzle-inclosing chamber comprising a plate above the nozzle, doors movably attached to said plate adapted to be opened against gravity to free the nozzle, and means actuated by the tap for opening and closing said doors upon the opening and closing of the tap.

4. In a tap protector, a nozzle-inclosing chamber comprising a plate above the nozzle, doors movably attached to said plate adapted to be opened against gravity to free the nozzle, and means adjustably secured to the tap for opening and closing said doors upon opening and closing of the tap.

5. In a tap protector, a nozzle-inclosing chamber comprising a plate above the nozzle, doors movably attached to said plate adapted to be opened to free the nozzle, projections on said doors, and means secured to the tap for engaging said projections to open and close said doors.

6. In a tap protector, a nozzle-inclosing chamber comprising a plate above the nozzle, doors adapted to be opened to free the nozzle, projections on said doors, means secured to the tap for engaging said projections to open and close said doors, and springs for yieldingly maintaining said doors in open position when the said means are disengaged from said projections.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN WELLS SHEPARD.
FREDERICK AUGUSTUS JONES.

Witnesses:

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