

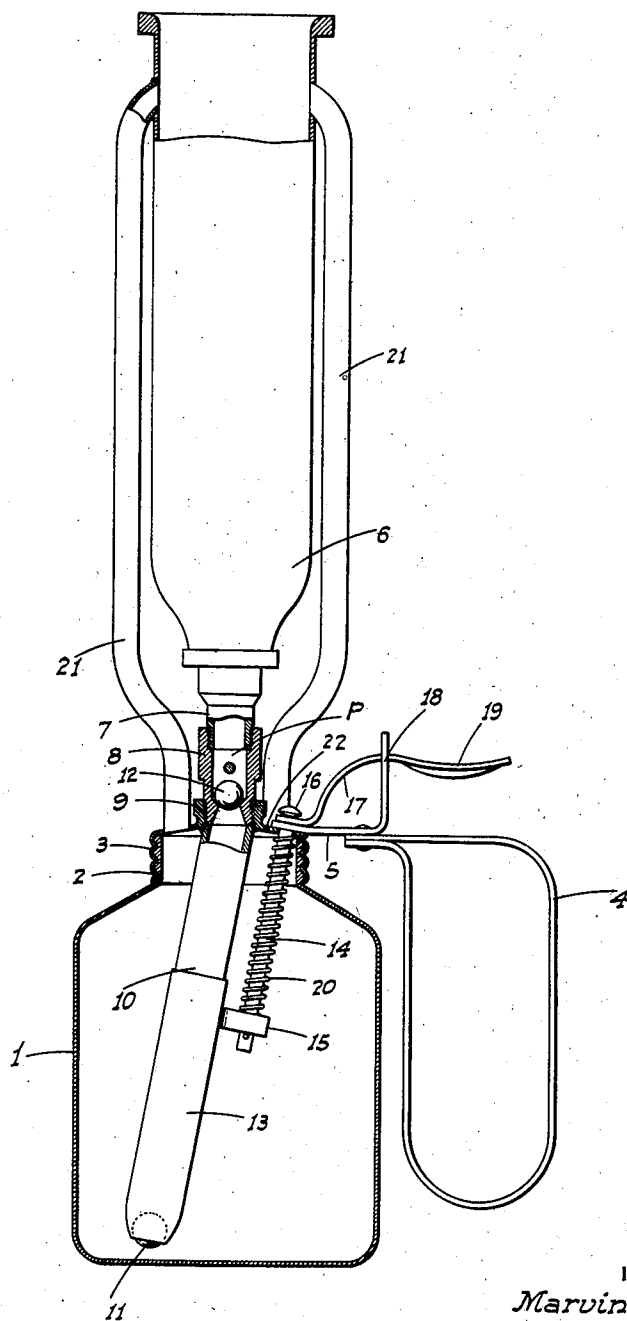
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COW TEAT MEDICATOR

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COW TEAT MEDICATOR

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This invention relates in general to a device adapted for use in dairies, and in particular the invention is directed to, and it is one of the objects to provide, a cow teat medicator.

In order to prevent spreading of certain diseases, such as mastitis, from one cow to another in milk-cow herds, it is desirable, and often necessary, to apply a disinfectant solution to the teats of the cows after milking, and the present invention is designed for this purpose; the device being hand supported and operated to readily and quickly effect treatment to the teats of a cow after milking.

A further object of this invention is to provide a device for the purpose described, which comprises a relatively small container or tank having a handle on one side thereof, an upstanding, vertically elongated and upwardly opening teat cup mounted on top of said tank, there being a passage between the tank and the lower end of said cup, and a finger actuated pump associated with the tank and teat cup operative to pump fluid from the tank upward into the teat cup; a check valve being interposed in said passage to prevent back-flow of fluid from the cup to the tank, and an overflow pipe leading from the cup adjacent its upper end downwardly to communication with said tank.

A further object of the invention is to produce a simple and inexpensive device and yet one which will be exceedingly effective for the purpose for which it is designed.

These objects I accomplish by means of such structure and relative arrangement of parts as will fully appear by a perusal of the following specification and claims.

The figure of the drawing is a side elevation of the device, partly in section.

Referring now more particularly to the characters of reference on the drawing, the device comprises a relatively small upstanding tank 1 formed at its upper end with a relatively large diameter neck 2 threaded for the reception of a screw cap 3. A handle 4 is disposed outwardly of and alongside the tank 1, and includes an attachment finger 5 which projects inwardly to fixed connection with the top of cap 3 to one side of the center thereof.

An upstanding, vertically elongated, upwardly opening teat cup 6 is disposed in centered relation above the tank 1; the lower end of said cup having a depending tubular stem 7 threaded into a nipple 8, which in turn is threaded into a neck 9 upstanding centrally from the top of and opening through the cap 3. By this arrangement it will

be seen that not only is the cup 6 supported from the tank but a passage P is formed therebetween.

A reciprocating sleeve pump, indicated at 10, is disposed in the tank and is mounted at its upper end in connection with the cap 3 and in communication with the passage P. This reciprocating sleeve pump includes an upwardly opening ball check 11 at the lower end, and another upwardly opening ball check 12 in the nipple 8.

Sliding movement of the reciprocating sleeve 13 of the pump is accomplished by means of a pull rod 14 which extends from an ear 15 on said sleeve upward through an opening in the cap 3 to a termination in a head 16 a short distance above said cap. A finger actuated lever 17 is secured at one end in loose play connection under the head 12 and is supported intermediate its ends for rocking movement by a fulcrum element 18; the other and outer end of the lever 17 being formed as a finger piece 19 disposed above the handle 4. A compression spring 20 surrounds the rod 14 between the ear 15 and cap 3 whereby to normally maintain the sleeve 13 in lowered position and with the ball check 11 adjacent the bottom of the tank.

A pair of oppositely disposed overflow pipes 21 communicate with the cup 6 adjacent but short of its upper end, and thence extend downwardly to the cap and through which said pipes open at their lower ends. The cap is formed at any convenient point with an air bleed opening 22 from which air can escape upon overflow of fluid into pipes 21 and return of such fluid to the tank.

In use, the tank 1 is filled with the fluid disinfectant and the operator grasps the handle 4, and by means of which handle the device can be easily manipulated.

Holding the device in an upright position the operator actuates the finger piece 19 up and down, which in turn actuates the pump 10, pumping fluid from tank through passage P into the teat cup 6. The check valve 12 functions to prevent back flow of fluid from the cup into the pump. The operator continues such pumping action until the cup 6 is filled to a point adjacent the upper end of overflow pipes 21. Thereafter the device is manipulated so that the cow's teats are projected, one at a time, full length into the cup 6, so that the fluid disinfectant in said cup successively treats the teats.

In practice I prefer to use an antiseptic solution which comprises a base of mineral oil to which the disinfectant and other ingredients are added. The use of a mineral oil as the base is

advantageous in that the solution when used not only disinfects but conditions the cow's teats, maintaining the same soft and pliable, which enhances milking, prevents chafing, and heals small cuts and abrasions. For example, in the process of machine milking, the milk duct or teat opening of some cows often becomes sore and inflamed, which in turn causes the cow to hold her milk, making her a slow, hard cow to milk. I have found that after using the medicator with a solution as above, these ducts become soft and pliable, thus enabling the use of milking machines on cows that otherwise would have to be milked by hand.

From the foregoing description it will be readily seen that I have produced such a device as substantially fulfills the objects of the invention as set forth herein.

While this specification sets forth in detail the present and preferred construction of the device, still in practice such deviations from such detail may be resorted to as do not form a departure from the spirit of the invention, as defined by the appended claims.

Having thus described my invention, what I claim as new and useful and desire to secure by Letters Patent is:

1. A portable medicator for cow teats, comprising, in unitary relation, a tank adapted to receive a fluid, an upwardly opening teat cup mounted on and upstanding from the tank, means forming a passage from the tank to the cup, and means mounted in fixed connection with the tank to pump fluid from said tank to the cup.

2. A portable medicator for cow teats, comprising, in unitary relation, a tank adapted to receive a fluid, an upwardly opening teat cup mounted in adjacent and fixed connection with the tank, means forming a passage from the tank to the cup, and means mounted in fixed connection with the tank to pump fluid from said tank to the cup; said last named means comprising a hand actuated pump, said pump including a check valve opening toward the cup and functioning to prevent back-flow of fluid from the cup to the tank.

3. A portable medicator as in claim 2 in which the teat cup is disposed above the tank; and an overflow pipe connecting at one end in communication with the cup adjacent the upper end of the latter, and connecting at the other end in communication with the tank, the tank having a relatively small bleed hole in the top thereof.

4. A portable medicator for cow teats, comprising, in unitary relation, a tank adapted to receive a fluid, an upwardly opening vertically elongated teat cup mounted in rigid connection with and upstanding from the top of the tank, means forming a passage from the tank to the cup at the bottom of the latter, a pump mounted in the tank in communication with said passage operative to pump fluid from the tank to the cup through said passage, a handle on said tank at one side thereof, and hand actuated means to operate the pump.

5. A portable medicator for cow teats, comprising, in unitary relation, a tank adapted to receive a fluid, an upwardly opening vertically elongated teat cup mounted in rigid connection with and upstanding from the top of the tank,

means forming a passage from the tank to the cup at the bottom of the latter, a pump mounted in the tank in communication with said passage operative to pump fluid from the tank to the cup through said passage, a handle on said tank at one side thereof, and hand actuated means to operate the pump; said hand actuated means including a vertically rockable lever having a finger piece overhanging the upper end of the handle.

6. A portable medicator for cow teats, comprising, in unitary relation, a tank adapted to receive a fluid, said tank including an upwardly opening neck having a screw cap threaded thereon, an upwardly opening vertically elongated teat cup mounted in rigid connection with and upstanding from said cap, there being a passage communicating between the lower end of said cup and said neck, and a pump mounted in the tank operative to pump fluid from said tank upwardly through said passage into the cup, said pump including a check valve opening toward the cup whereby to prevent back flow of fluid from the cup to the tank.

7. A portable medicator for cow teats, comprising, in unitary relation, a tank adapted to receive a fluid, said tank including an upwardly opening neck having a screw cap threaded thereon, an upwardly opening vertically elongated teat cup mounted in rigid connection with and upstanding from said cap, there being a passage communicating between the lower end of said cup and said neck, and a pump mounted in the tank operative to pump fluid from said tank upwardly through said passage into the cup, said pump including a check valve opening toward the cup whereby to prevent back flow of fluid from the cup to the tank; there being a handle secured in connection with said cap and disposed alongside the tank, and said pump including an actuating element adapted for finger engagement and overhanging the upper end of said handle.

8. A portable medicator for cow teats, comprising, in unitary relation, a relatively small tank having a handle alongside thereof, an upwardly opening, vertically elongated teat cup mounted in upstanding position centrally on top of and in communication with the tank, and a pump in the tank operative to pump fluid into the cup; said pump including a check valve arranged to prevent back-flow from the cup into the tank, and an actuating element overhanging the handle for finger engagement.

9. A portable medicator for cow teats, comprising, in unitary relation, a relatively small tank having a handle alongside thereof, an upwardly opening, vertically elongated teat cup mounted in upstanding position centrally on top of and in communication with the tank, a pump in the tank operative to pump fluid from the tank to the cup, said pump including a check valve arranged to prevent back-flow from the cup to the pump, means to actuate said pump including a movable finger element disposed adjacent the handle, and a pair of oppositely disposed overflow pipes communicating between the cup adjacent but short of its upper end and the tank at the top.

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