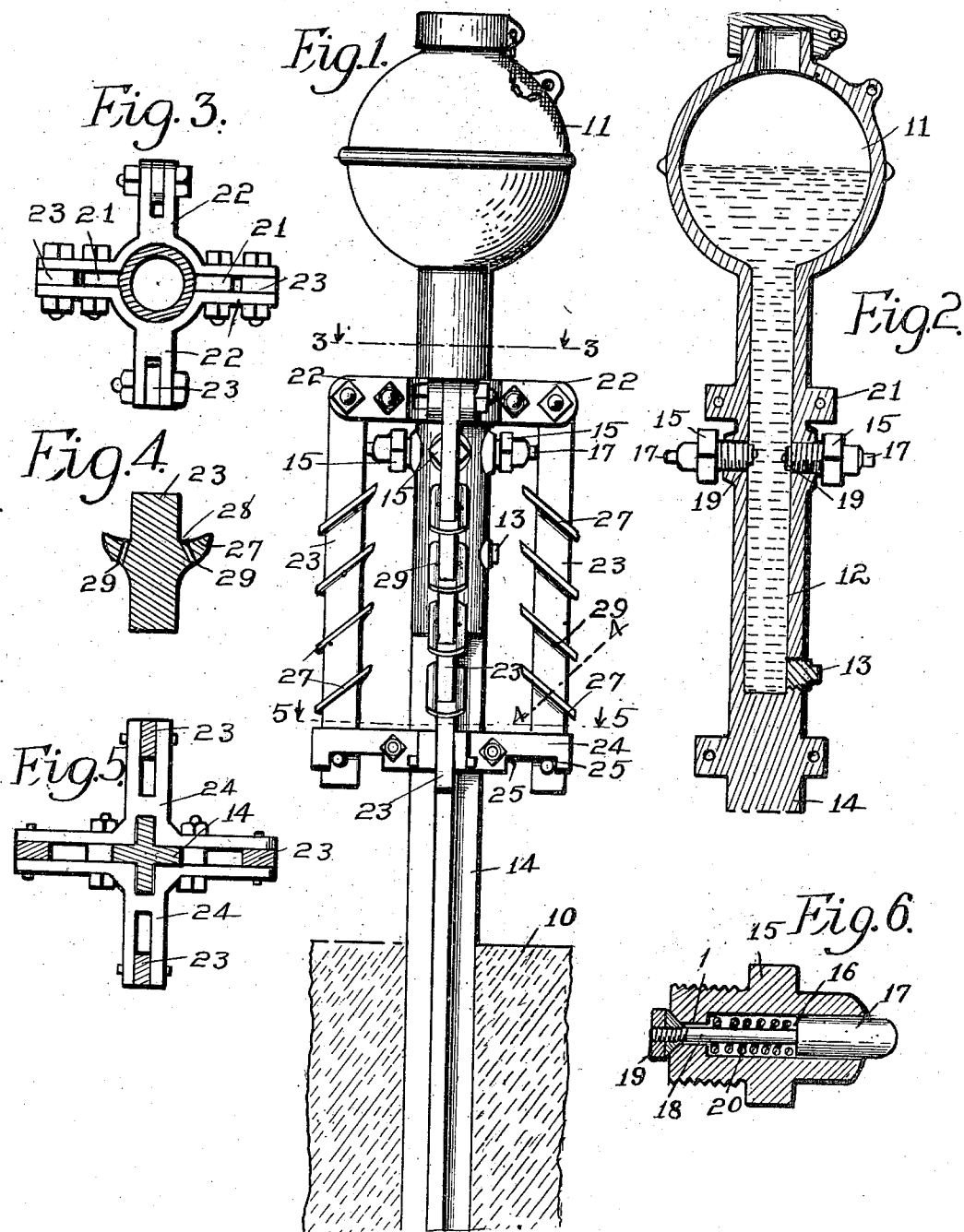


F. H. SCHULTZ.
ANIMAL OILING DEVICE.
APPLICATION FILED DEC. 15, 1911.

1,045,198.

Patented Nov. 26, 1912.



Witnesses
A. S. Hague.
W. L. Loftis.

Inventor
Ferdinand H. Schultz
by Ralph D. Wright

UNITED STATES PATENT OFFICE.

FERDINAND H. SCHULTZ, OF TREYNOR, IOWA.

ANIMAL-OILING DEVICE.

1,045,198.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FERDINAND H. SCHULTZ, a citizen of the United States, residing at Treynor, in the county of Pottawattamie and State of Iowa, have invented a certain new and useful Animal-Oiling Device, of which the following is a specification.

The object of my invention is to provide a post designed to be permanently set in a concrete base or the like and provided with a receptacle for oil or other liquid insecticide or disinfectant and also provided with valves through which quantities of said liquid may be removed; and also to provide a post of this kind in which the sediment from the liquid may, when desired, be drawn off to thereby prevent sediment from in any way interfering with the flow of liquid through the valve; and also to provide a post of this kind of simple, durable and inexpensive construction.

A further object is to provide means whereby the valves are opened to permit the discharge of liquid from the receptacle by an animal rubbing against a suitable roughened surface provided on the post for that purpose, and also to provide means whereby the liquid is conveyed to the animal rubbing against such roughened surface.

More specifically it is my object to provide cup-shaped receptacles of this kind so arranged that a certain proportion of the liquid delivered to the upper one will be carried to the outer end of the cup-shaped receptacle and a certain proportion will be discharged into the cup-shaped receptacle below so that when the liquid flows from the post through the valve it will be equally distributed to the various cup-shaped receptacles on the levers.

A further object is to provide an improved valve mechanism for devices of this kind of simple durable and inexpensive construction.

My invention consists in certain details, in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims and illustrated in the accompanying drawings in which:

Figure 1 shows a side elevation of an animal oiling device embodying my invention. Fig. 2 shows a vertical, central, sectional view of the upper portion of the post.

Fig. 3 shows a horizontal, sectional view on the line 3—3 of Fig. 1. Fig. 4 shows an enlarged, detail, sectional view on the line 4—4 of Fig. 1. Fig. 5 shows a sectional view on the line 5—5 of Fig. 1, and Fig. 6 shows an enlarged, detail, sectional view of one of the valves.

Referring to the accompanying drawings, I have used the reference numeral 10 to indicate a concrete base in which the post is permanently fixed. The entire post is preferably cast complete in one piece and is provided at its top with a spherical oil receptacle 11 and a hollow tubular portion 12 below the top. Near the bottom of this hollow tubular portion is a screw plug 13 which may be removed for the purpose of cleaning out the liquid receptacle. The lower portion of the post below the tubular receptacle may be made of any desired shape to be set into the concrete post 10. This portion is indicated by the numeral 14. At a point spaced above the bottom of the part 12 is a series of screw plugs, each plug comprising a body portion 15 having a large opening 16 at one end and a small opening at the other end terminating in a valve seat. Mounted in the opening 12 is a cylindrical sliding member 17 loosely fitted in the opening 16 so that liquid may flow around it slowly. The sliding member 17 is provided with a rod 18 having a valve 19 on its inner end designed to coact with the valve seat and a spring 20 is provided for normally holding the valve toward its seat and the member 17 projected outwardly from the screw plug. When the member 17 is pushed inwardly the valve is opened and the liquid may flow slowly around the member 17 to be discharged from the outer end of the screw plug.

Arranged above the screw plugs is a series of lugs 21 to which the slotted arms 22 are fixed, there being four of these arms, as clearly shown in Fig. 3. Fitted in each slotted arm is a downwardly extended lever 23, the lower end of which extends through between the slotted arms 24 which are bolted to the post near the lower ends of the arms 23, said slots forming guides for permitting the levers 23 to move inwardly and outwardly toward and from the post. In order to limit the movement of these arms, I have provided the shoulders 25 on the under surfaces of the slotted arms 24, which shoulders are engaged by the pins 26 on the levers

23. The said levers are also so arranged that when they hang straight downwardly they engage the sliding members 17 of the valves. These sliding members, as before explained, are engaged by the springs 20 which normally hold them outwardly and also hold the valves closed and said springs furnish sufficient resilience to hold the lower ends of the levers 23 to their outward limits.

One of the important and advantageous features of my invention consists in providing each of the levers 23 with a series of inclined oil cups 27. These oil cups are preferably cast integral with the levers and are inclined from the inner ends of the levers downwardly and outwardly and they project outwardly from the levers on all sides of the levers. These cups are preferably formed concave on their upper portions, as shown at 28 in Fig. 4, and all except the upper ones of said cups are provided near their upper inner ends with openings 29 through which a quantity of the liquid received in the cups may be discharged into the upper end of the next adjoining cup below. Some of the advantages of these cup-shaped devices in connection with an animal oiling device are as follows: First, it is desirable to convey the liquid discharged from the valves from the inner edges of the levers to the outer edges thereof. Second, it is desirable to provide a roughened surface on the outer edges of the levers and third, it is desirable to provide means whereby a quantity of the thick heavy liquid will be contained on the cups in such position that it will be readily and easily transmitted to the animal's skin when an animal is rubbing against the lever. All of these advantageous features are provided for in my improved cup arrangement and when an animal rubs against one of the levers the valve 19 is opened and a quantity of the liquid flows along the sliding member 17 to the outer end thereof and then flows down the inner surface of the adjacent lever. When it strikes the upper inner end of the first cup some of the liquid will flow along the sides of the cup to the outer end thereof and some of it will pass through the openings 29 and run down the sides of the lever to the next cup below so that as long as an animal is pressing upon the lower end of a lever the oil will be delivered to the outer ends of all of the cups and thus will be thoroughly rubbed into the animal's hide. After the animal has ceased to press upon the lever a quantity of the thick heavy liquid will be retained at the outer end of each cup so that the next animal rubbing against the lever will rub off the oil that is contained on the outer ends of the cups.

It will be seen that the device embodying my invention is of extremely strong and durable construction; that a comparatively

large quantity of oil or other liquid may be contained therein and that any sediment or deposit in the liquid may be removed through the opening at the lower end of the liquid receptacle; and it is further obvious that the oil will be delivered to the outer surface of the rubbing levers so that it will be transmitted to the animal's hide and that no absorbent material or the like, which is likely to become worn off or rendered ineffective in other ways, is needed in my improved device.

I claim as my invention:

1. In a device of the class described, the combination of a post having an oil receptacle at its top and a chamber communicating with the oil receptacle and extending downwardly into the post, a screw plug inserted in the post and having an opening communicating with the chamber in the post and also having a valve seat at its inner end, a slide bar mounted in the screw plug, a valve stem connected with the slide bar, a valve on the stem adjacent to the valve seat, a spring within the screw plug to normally hold the valve toward its seat, said sliding bar being loose in the plug so that liquid may flow around it, a lever pivoted to the post above the screw plug and designed to engage the sliding member, said lever being provided with ribs extending from the inner edge of the lever downwardly and outwardly, to conduct liquid outwardly and downwardly toward the outer edge of said lever.

2. In a device of the class described, the combination of a post having an oil receptacle at its top, and a chamber communicating with the oil receptacle and extending downwardly into the post, a screw plug inserted in the post and having an opening communicating with the chamber in the post and also having a valve seat at its inner end, a slide bar mounted in the screw plug, a valve stem connected with the slide bar, a valve on the stem adjacent to the valve seat, a spring within the screw plug to normally hold the valve toward its seat, said sliding member being loose in the plug so that liquid may flow around it, a lever pivoted to the post above the screw plug and designed to engage the sliding member, there being a series of pockets formed on said levers entirely surrounding them and inclined downwardly and outwardly, the outer edges of the pockets forming roughened rubbing surfaces, to conduct liquid outwardly and downwardly toward the outer edge of said lever.

3. In a device of the class described, the combination of a post having an oil receptacle at its top, and a chamber communicating with the oil receptacle and extending downwardly into the post, a screw plug inserted in the post and having an opening com-

communicating with the chamber in the post and also having a valve seat at its inner end, a slide bar mounted in the screw plug, a valve stem connected with the slide bar, a valve on the stem adjacent to the valve seat, a spring within the screw plug to normally hold the valve toward its seat, said sliding member being loose in the plug so that liquid may flow around it, a lever pivoted to the post above the screw plug and designed to engage the sliding member, there being a series of pockets formed on said levers entirely surrounding them and inclined downwardly and outwardly, the outer edges of the pockets forming roughened rubbing surfaces, and the upper ones of said pockets being provided with vertical openings through which a quantity of liquid may pass to the inner end of the pocket below, for the purposes stated.

4. A device of the class described, comprising a post cast complete in one piece and comprising a hollow oil chamber at the top and a cylindrical oil chamber at the upper end of the post communicating with the hollow top, lugs formed on the sides of the post near its top, a number of screw plugs inserted in the post below said lugs, each screw plug comprising a body portion having a longitudinal opening therein and a valve seat at the inner end of the opening, a sliding member in each lug projected beyond the outer surfaces thereof, a valve stem connected with the sliding member, a valve on the inner end of the valve stem, a spring within the screw plug to normally hold the sliding member to its outer limit, a series of slotted arms fixed to said lugs on the post, a series of levers pivotally mounted in said slotted arms and extended downwardly, guides for the lower ends of the levers, means for limiting the sliding movements of the lower ends of the levers, each lever

being provided with a series of integral pockets completely surrounding the levers, and each being inclined downwardly and outwardly, the upper ones of said pockets being provided near their inner ends with openings, for the purposes stated.

5. A device of the class described, comprising a post cast complete in one piece and comprising a hollow oil chamber at the top and a cylindrical oil chamber at the upper end of the post communicating with the hollow top, lugs formed on the sides of the post near its top, a number of screw plugs inserted in the post below said lugs, each screw plug comprising a body portion having a longitudinal opening therein and a valve seat at the inner end of the opening, a sliding member in each lug projected beyond the outer surfaces thereof, a valve stem connected with the sliding member, a valve on the inner end of the valve stem, a spring within the screw plug to normally hold the sliding member to its outer limit, a series of slotted arms fixed to said lugs on the post, a series of levers pivotally mounted in said slotted arms and extended downwardly, guides for the lower ends of the levers, means for limiting the sliding movements of the lower ends of the levers, each lever being provided with a series of integral pockets completely surrounding the levers and each being inclined downwardly and outwardly, the upper ones of said pockets being provided near their inner ends with openings, and means whereby the sediment in the bottom of the cylindrical chamber may be removed.

Des Moines, Iowa, November 17, 1911.

FERDINAND H. SCHULTZ.

Witnesses:

JORGEN JENSEN,
JOE SEABOLT.