C. H. GOETSCHE.

HOG OILER.

APPLICATION FILED JUNE 19, 1916.

1,197,119.

Patented Sept. 5, 1916.

Fig. 1.

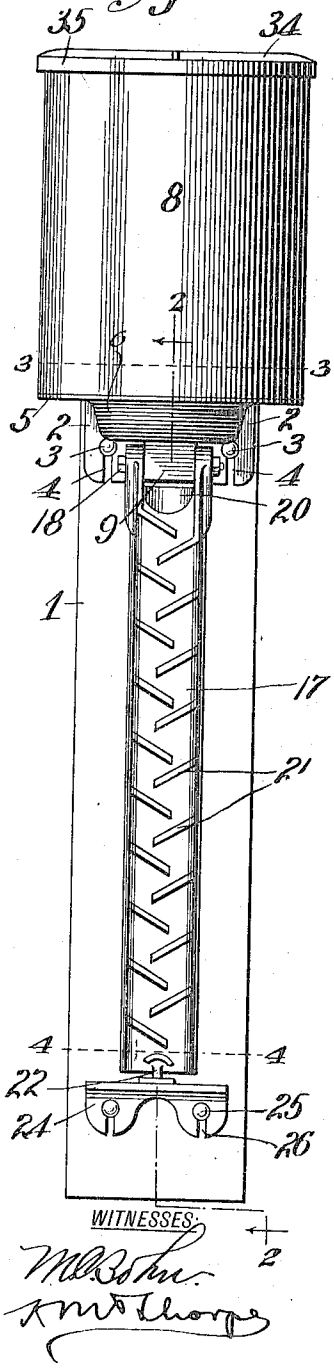


Fig. 2.

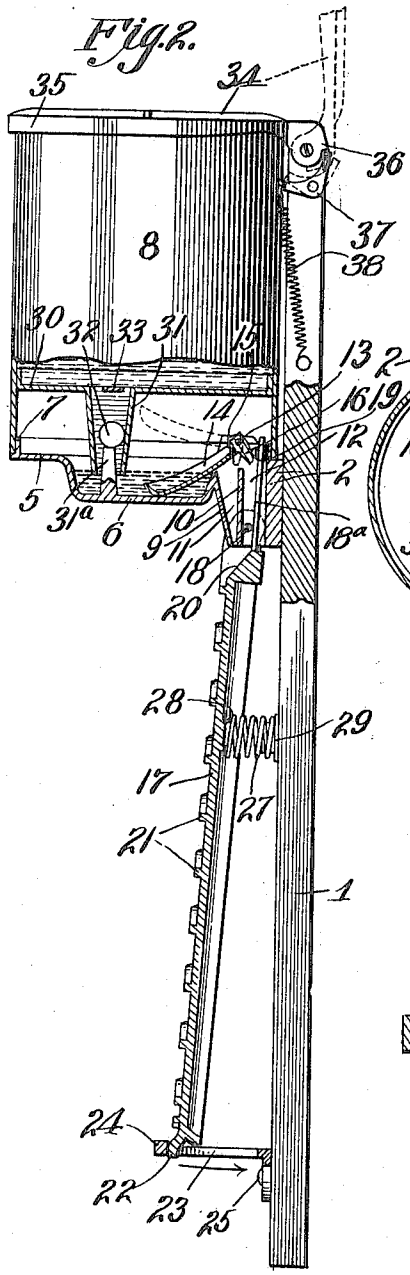


Fig. 3.

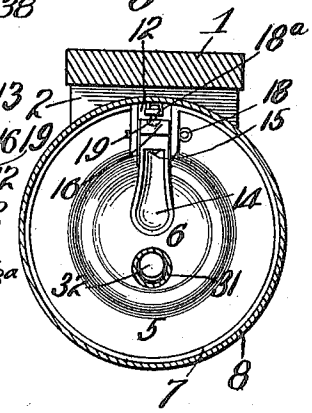
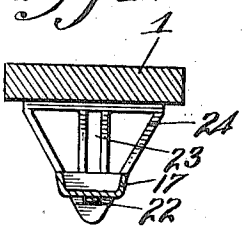


Fig. 4.



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HOG-OILER.

1,197,119. Specification of Letters Patent. Patented Sept. 5, 1916.

Application filed June 19, 1916. Serial No. 104,633.

To all whom it may concern:

Be it known that I, CHARLES H. GOETSCHE, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Hog-Oilers, of which the following is a specification.

This invention relates to hog oilers, and more especially to that class which is actuated by the rubbing of a hog against it, to supply a fixed quantity of oil to the part against which the animal rubs in order that the oil shall be applied to the animal at the point at which he endeavors to secure relief.

The object of my invention is to produce a hog oiler of the character mentioned which will perform its function efficiently, and which is simple, strong, durable and inexpensive in construction.

To this end the invention consists in certain novel and peculiar features of construction and organization of parts as hereinafter described and claimed, and in order that it may be more clearly understood, reference is to be had to the accompanying drawing, in which:

Figure 1, is a front view of a hog oiler embodying my invention. Fig. 2, is a side elevation with part of the oiler shown in central vertical section on the line 2—2 of Fig. 1. Fig. 3, is a horizontal section on the line 3—3 of Fig. 1. Fig. 4, is a horizontal section on the line 4—4 of Fig. 1.

In the said drawing 1 is a board or backing of suitable length and adapted to be bolted to a post, building or other suitable support.

2 is an angle bracket having its vertical arm fitting against the backing 1 and secured thereto by bolts 3, the said arm having slots 4 engaging the bolts so that the bracket can be disengaged from the latter without the necessity of withdrawing the clamping bolts from the backing. The upper or horizontal arm of the angle bracket is in the form of a plate 5 having a central depressed portion or bowl 6, and an upstanding flange 7, the latter fitting within the lower end of an oil tank 8, resting upon the horizontal arm or plate 5 of the bracket. The angle bracket is provided centrally with a vertical tubular boss 9 at the rear side of the bowl 6, and the side walls of the said boss extend upward beyond the arm or plate 5 of the bracket, and between said side walls the rear wall of the bowl 6 is cut down so as to establish connection between the chamber of said bowl and the passage through the boss, and the latter is provided with a transverse partition 10 dividing the said partition into a front passage 11 and a rear passage 12.

Pivoted for movement in a vertical plane on a cross pin 13 mounted in the side walls of the hollow boss near the upper end of the same, is a spoon 14 which normally extends downward and is immersed at its free or front end in oil standing in the bowl to the top of the cut-down portion thereof, and near its pivoted end said spoon is provided with an orifice 15 through which oil dipped up by the spoon, is discharged into passage 11, as hereinafter explained, and rearward of said orifice the spoon is provided with a depending heel 16 against which forward pressure is applied to raise the spoon to the position shown by dotted lines, Fig. 2.

17 is a lever having its upper end forked and receiving the lower end of the hollow boss, and pivoted to said boss by a cross bolt 18 located rearward of the partition 10, and said lever, above said bolt, is reduced in width to form an extension 18^a terminating rearward of the heel of the spoon to apply forward pressure upon said heel to cause the spoon to rock until its front end is higher than its rear end so that oil will flow from the spoon through the discharge orifice thereof, and in order that the quantity of oil may be regulated and determined the upper end of the extension lever carries a pin or screw 19 adjustable toward and from the heel of the spoon accordingly as it is desired that the bowl portion of the spoon shall be wholly or partly immersed in the oil in the bowl, the complete immersion of the spoon of course effecting the discharge of a larger quantity of oil down into the passage 11 of the boss, than is effected when the bowl of the spoon is but partly immersed in the oil.

The upper end of the lever within the fork thereof slopes downward and forward at 20 so that oil dropping thereon after passing through passage 11, flows down upon the front surface of the lever, and in order to retard this flow and at the same time afford

a good rubbing or scratching surface, the face of the lever is provided with two series of oppositely inclined ribs 21, the inner or lower ends of the ribs of the two series breaking joint so that the oil as it flows down the face of the lever shall follow a tortuous course.

The lower end of the lever terminates in a tongue 22 engaging a slot 23 of angle bracket 24 secured by bolts 25 to the backing 1; the vertical arm of said bracket having notches 26 receiving said bolts, so that the bracket can be disengaged from the backing without removing the bolts therefrom.

To hold the lower end of the lever swung outward and to permit the bowl of the spoon to be normally immersed in the bowl of the first named bracket, a helical spring 27, is interposed between the lever and the backing below the pivotal point of the former, the lever having a rearwardly projecting boss 28 and the backing a forwardly projecting boss 29 fitting in opposite ends of the spring to retain the same in position.

The oil tank is of the vacuum type, and occupies an inverted position when standing upon the upper arm or plate of the first named bracket. The top 30 of the tank when the same is inverted is spaced above the arm or plate, and is provided with a downwardly depending nozzle 31 fitting loosely over an upstanding guide pin 31[a] in the bowl of said arm or plate, and fitting in the said nozzle is a spherical valve 32 held unseated by said pin when the tank is in operative position, as shown, said valve being adapted to drop down in said nozzle and wedge in its reduced end to prevent the escape of oil when the tank is withdrawn from said pin but is in an inverted position. Bridging the enlarged end of nozzle 31 is a cross piece 33 to support the valve when the tank is reversed in position for filling purposes, it being noted that when the valve rests on said cross piece, it does not interfere with the filling operation of the tank, and that as the tank is inverted, the valve drops to the reduced end of the nozzle and thus prevents the escape of oil therefrom until it is unseated by the said pin, and in this connection it will be noted that the pin and nozzle are disposed eccentrically of the bowl and tank respectively and thus coöperate as guides with the flange 7 in the placing of the tank in operative position.

To guard against the accidental dislodgment of the tank from operative position through a jolt or by a hog rearing up against it, a cover 34 is pivoted to the upper end of the backing and rests upon the tank, the cover having a depending marginal flange 35 encircling the upper end of the tank.

To prevent the cover being swung upward accidentally it is provided rearward of its pivotal point with a downwardly facing shoulder 36 and engaging said shoulder is an L-shaped trigger 37 pivoted to the backing and held yielding against the pivoted end of the cover by a retractile spring 38 secured at its opposite ends to the front end of the trigger and to the backing. The cover is rounded below its pivotal point so that when the tank is not in position, it can swing downward until the underlying bowl and spoon are exposed for convenience in cleaning the same. The cover can also be swung upward and rearward to substantially the position shown by dotted lines, Fig. 2, to enable the attendant to readily place the tank in or remove it from position upon the arm or plate of the first named bracket, it being understood of course that the trigger must first be pressed rearward of the said shoulder of the cover. After the tank is placed in position the operator swings the cover down upon it and the trigger automatically swings forward under the said shoulder.

When a hog rubs against the ribs of the lever to scratch himself, the lever swings rearward at its lower end toward or beyond a vertical position, and at the same time the spoon swings upward and discharges its contents as hereinbefore explained, the oil running down the lever and under the rubbing of the hog penetrating to his hide and thereby obtaining access to the vermin and killing the same, it being noted that a single operation of the lever effects the delivering of but a single charge of oil and that as soon as the hog releases the pressure on the lever the spring returns the latter to normal position and the spoon drops back into the oil in the bowl 6 and is therefore ready to deliver another spoonful of oil to the lever when the same is again operated.

It will be understood that when the tank is first placed in inverted position upon the arm or plate of the upper bracket and the valve is therefore unseated by the pin of said arm or plate, oil will flow from the tank into the bowl 6 until the lower end of the nozzle is covered. This cuts off the entrance of air to the tank and arrests further escape of oil from the tank until sufficient oil is removed from the underlying bowl to break the liquid seal at the lower end of the nozzle, and it will be understood of course that the lower end of the said nozzle must occupy a lower plane than the cut down wall of said bowl, as otherwise the entire charge of oil from the tank would escape.

From the above description it will be apparent that I have produced a hog oiler embodying the features of advantage enumerated as desirable in the statement of the object of the invention, and while I have illustrated and described the preferred embodiment of the invention, it will be apparent

that it is susceptible of modification in minor particulars without departing from the spirit and scope of the appended claims.

I claim:

1. A hog oiler comprising a suitably supported bracket provided with a bowl and an upright passage at one side of the bowl, means mounted upon the bracket for charging the bowl thereof with a liquid, a spoon pivoted to the bracket above the level of the liquid and immersed at its free end in the liquid in the bowl and provided above the level of the liquid with an opening to discharge into said passage, and an upright lever pivoted below its upper end to said bracket and having its upper extremity in position to engage said spoon and adapted when its lower end is pressed back, to rock said spoon until liquid spooned thereby from the bowl, shall flow through the said opening into said passage; said lever having a sloping surface vertically below said passage to receive the liquid discharged from the spoon and conduct it to the front face of the lever that it may flow downward on said face.

2. A hog oiler comprising a suitably supported bracket provided with a bowl and an upright passage at one side of the bowl, means mounted upon the bracket for charging the bowl thereof with a liquid, and for automatically replenishing such supply of liquid when its level falls a predetermined distance, a spoon pivoted to the bracket above the level of the liquid and immersed at its free end in the liquid in the bowl and provided above the level of the liquid with an opening to discharge into said passage, and an upright lever pivoted below its upper end to said bracket and having its upper extremity in position to engage said spoon and adapted when its lower end is pressed back, to rock said spoon until liquid spooned thereby from the bowl, shall flow through the said opening into said passage; said lever having a sloping surface vertically below said passage to receive the liquid discharged from the spoon and conduct it to the front face of the lever that it may flow downward on said face.

3. A hog oiler comprising a suitably supported bracket provided with a bowl and an upright passage at one side of the bowl, means mounted upon the bracket for charging the bowl thereof with a liquid, and for automatically replenishing such supply of liquid when its level falls a predetermined distance, a spoon pivoted to the bracket above the level of the liquid and immersed at its free end in the liquid in the bowl and provided above the level of the liquid with an opening to discharge into said passage, an upright lever pivoted below its upper end to said bracket and having its upper extremity in position to engage said spoon and adapted when its lower end is pressed back, to rock said spoon until liquid spooned thereby from the bowl, shall flow through the said opening into said passage; said lever having a sloping surface vertically below said passage to receive the liquid discharged from the spoon and conduct it to the front face of the lever that it may flow downward on said face, a bracket having a slot receiving the lower end of said lever to guide the same in its swinging movements, and a spring exerting pressure on the lever tending to hold it in a downwardly and forwardly sloping position.

4. A hog oiler comprising a suitably supported bracket provided with a bowl and an upright passage at one side of the bowl, and an upright partition connecting the side walls of said passage, a lever having a forked upper end pivoted to the bracket at opposite sides of said passage, said lever being provided on its front face with downwardly and inwardly extending and overlapping baffle ribs and a downwardly and forwardly inclined surface leading to said ribbed surface at the base of the bifurcation, and with an extension projecting up through said passage at the back of the said partition thereof, a spoon pivoted to the bracket and extending downwardly and forwardly into the bowl thereof and provided with an opening to discharge into said passage forward of said partition and upon the inclined surface of said lever and provided also with a depending heel in the path of forward movement of the upper end of said extension of the lever, and a pin carried by the upper end of said extension of the lever and adjustable toward and from the heel of said spoon, yielding means for holding the lever normally with its lower end pressed forward and its extension withdrawn from the heel of the spoon, means to brace the lever against lateral movement, means for charging the bowl of the bracket with liquid to a predetermined depth and for replenishing the supply of liquid in the bowl when the level of the liquid therein has fallen a predetermined distance through removals of liquid by said spoon.

5. A hog oiler comprising an upright backing, a bracket secured thereto and provided with a bowl, a passage at one side of said bowl, a spoon pivoted in the bracket and normally standing with its free or front end within the bowl and provided near its pivoted end with a discharge opening and rearward of said opening with a depending heel, a lever fulcrumed near its upper end to the bracket and provided with an upper extension terminating back of said heel, and with an inclined surface at the lower end of said passage, a bracket secured to the backing and provided with a slot receiving the lower end of said lever, a spring inter-

posed between the backing and the lever and tending to hold the lower end of the same at the front end of said slot, the upper end of said lever, when its lower end is pressed toward the backing, applying pressure on said heel to raise the free end of the spoon to a higher position than the discharge opening thereof, an oil tank resting on the first-named bracket and provided with a valve-controlled nozzle depending into the said bowl, means within the bowl projecting into said nozzle and holding the valve unseated to permit liquid to flow from the tank into the bowl until the lower end of said nozzle is submerged in the liquid in the bowl, and means for holding the tank reliably upon the said bracket.

6. A hog oiler comprising an upright backing, a bracket secured thereto and provided with a bowl, a pin standing in said bowl and an upstanding flange, a tank resting upon said bracket over said bowl and within said flange and provided with a nozzle depending within the bowl and fitting loosely on said pin, a valve within said nozzle and supported on said pin to leave the nozzle unobstructed to the flow of liquid from the tank into the bowl, means adapted to be actuated to dip liquid from the bowl and deliver it at a point below the bracket, a flanged cover engaging the upper end and external surface of the tank and provided with a downwardly facing shoulder and a spring actuated trigger mounted on the backing and engaging said shoulder to prevent upward movement of the cover; said trigger being adapted to engage the pivoted end of the cover above the shoulder to hold the cover in elevated position.

In testimony whereof, I affix my signature, in the presence of two witnesses.

CHARLES H. GOETSCHE.

Witnesses:
ARTHUR C. HAYSLER,
ORVILLE A. HILLS.