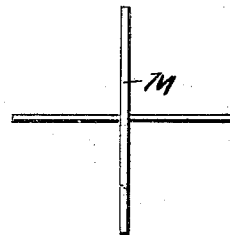
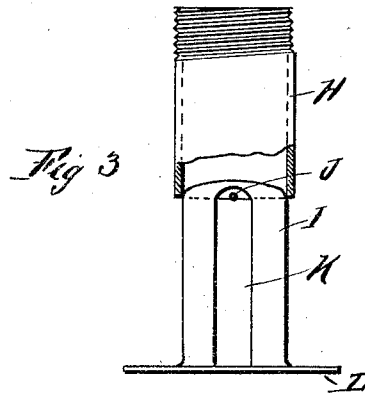
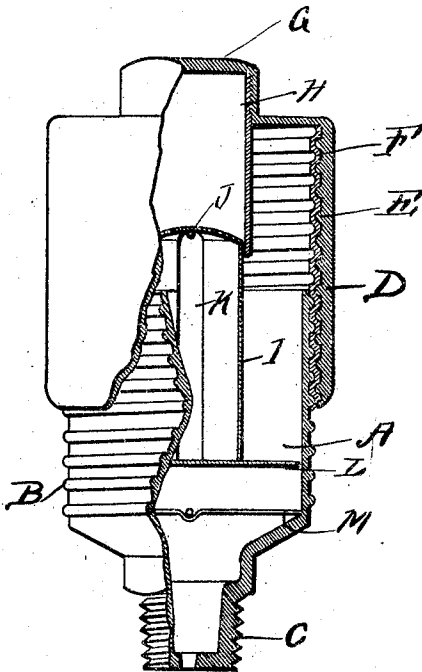
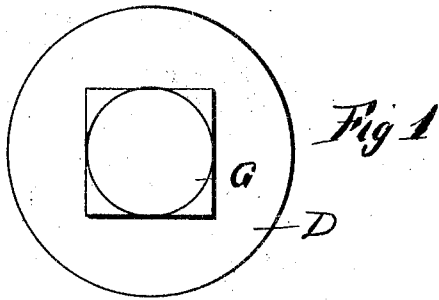


J. F. LEWIS.
 AUTOMATIC GREASE CUP.
 APPLICATION FILED AUG. 12, 1908.

1,003,276.

Patented Sept. 12, 1911.



WITNESSES

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AUTOMATIC GREASE-CUP.

1,003,276.

Specification of Letters Patent. Patented Sept. 12, 1911.

Application filed August 12, 1908. Serial No. 448,135.

To all whom it may concern:

Be it known that I, JOHN F. LEWIS, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Automatic Grease-Cups, of which the following is a specification.

My invention relates to a new and useful improvement in automatic grease cups, and has for its object to provide an exceedingly simple and effective construction by which the screw threads upon the body and cap will be packed against the escape of air in order that a certain amount of air pressure may be created in the cup for feeding the grease therefrom.

A further object of my invention is to so arrange and guide the disk as to cause it to maintain a level surface upon the grease contained in the cup and scrape the sides of the cup in its downward movement, and a still further object of my invention is to provide means for preventing the disk from closing upon the bottom of the cup which would stop the feeding of the grease.

With these ends in view, this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claims.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction in detail, referring by letter to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a plan view of my improved grease cup. Fig. 2, a sectional elevation of the same, enough of the body and cap being broken away to show the interior construction. Fig. 3, a side view of the plunger disk and the telescoping tubes for guiding the same, and Fig. 4, a plan view of the cross wires for limiting the downward movement of the plunger disk.

In carrying out my invention as here embodied, A represents the body of the cup having the screw threads B formed upon its outer surface, and as is usual, the body is provided with a threaded nipple C for screwing into the hole through which the lubricant is conveyed to the bearing to be oiled.

D represents the cap or cover which has

formed upon its inner surface the screw threads E over which is fitted a leather or other compressible material as indicated at F, and this compressible material is threaded to correspond with the threads E and is adapted to engage with the threads B of the body so that when the cap is secured upon the body the threads will be packed against the escape of air. The cap has formed therewith the wrench hold G the interior of which is threaded to receive the threaded end of the tube H, and I is the disk tube which is adapted to telescope within the tube H and is guided and prevented from being entirely withdrawn therefrom by the pin J passing through the slots K formed in said tube I. The disk L is secured to or formed with the tube I and is of such diameter as to insure the scraping of the grease from the sides of the cup as said disk moves downward, but this disk should not bind upon said sides, nor prevent the passage of air between its edges and the walls of the cup.

M represents two cross wires secured in the cup at the point where the bottom is inclined, the object of which is to arrest the downward movement of the disk L and prevent it from seating upon the bottom of the cup and thereby excluding the air from the top of the grease which would prevent the further feeding of said grease.

From the foregoing description it will be seen that a grease cup of exceedingly simple construction is provided in which the grease will be automatically fed by the pressure of the air contained in the cup, and this air pressure may be increased from time to time by the screwing down of the cap upon the body. The disk L resting upon the top of the grease will keep a level surface and facilitate the action of the air, and when the disk comes in contact with the cross wires M sufficient air will pass around the edges of the disk L to continue to force the grease from the cup so that the entire contents of the cup will be fed to the bearing. The disk being free to move downward in the cup will follow the grease as it is fed as the tube I to which this disk is attached is guided in the tube J the disk cannot be tilted or displaced it greatly facilitates this operation.

Of course I do not wish to be limited to the exact details of construction here shown as these may be varied without departing

from the spirit of my invention, as for instance, the threads E might be omitted and the leather or compressible material F otherwise secured within the cap, also the
5 threads B may be omitted and the cover D moved up and down on the body without these threads.

Having thus fully described my invention, what I claim as new and useful, is—

10 1. The herein described combination of a grease cup body, having an inclined bottom, a cap adapted to move up and down upon said body, cross wires located at the top of the incline of said bottom, a tube located within the cap, a slotted tube telescoping with the first named tube, a pin set in the first named tube and passing through the slot in the slotted tube, and a plunger disk carried by the lower end of the slotted
15 tube, said disk adapted to contact with the cross wires, as and for the purpose set forth.

20 2. In a grease cup, the combination of a

body, the bottom of said body being inclined, cross wires located at the top of the incline of said bottom, said body having
25 external threads formed thereon, a cap, having threads formed upon the interior thereof, a layer of leather covering said internal threads, said leather being threaded and adapted to engage the external threads, a
30 tube located within the cap, a slotted tube adapted to telescope the first named tube, a pin for holding the last named tube in position, and a plunger disk secured to the slotted tube, as and for the purpose set
35 forth.

In testimony whereof, I have hereunto affixed my signature in the presence of two subscribing witnesses.

JOHN F. LEWIS.

Witnesses:

E. N. SCHOFIELD,
EDW. W. ANSTICE.