

(No Model.)

W. SCHOENDELEN.

GREASE CUP.

No. 314,062.

Patented Mar. 17, 1885.

Fig. 8.

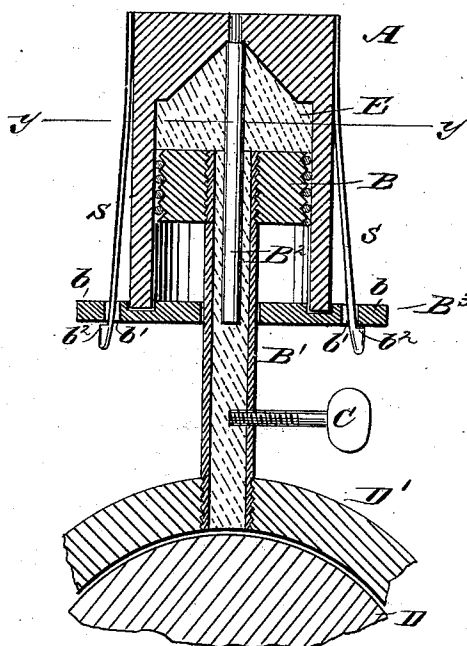
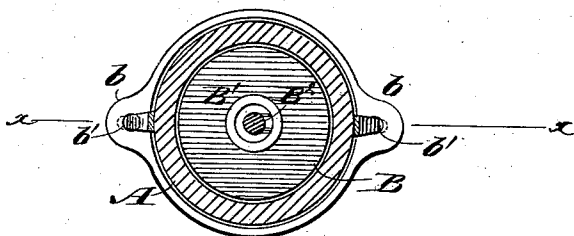


Fig. 2.



WITNESSES:

F. Mc Artie.

C. Sedgwick

INVENTOR:

W. Schoendelen

BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM SCHOENDELEN, OF DAVENPORT, IOWA.

GREASE-CUP.

SPECIFICATION forming part of Letters Patent No. 314,062, dated March 17, 1885.

Application filed January 27, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SCHOENDELEN, of Davenport, in the county of Scott and State of Iowa, have invented a new and Improved Grease-Cup, of which the following is a full, clear, and exact description.

This invention relates to grease-cups for lubricating shafts and other parts of machinery, including the crank-pins, slides, and cross-heads of engines; and it consists in a grease-cup of novel construction, whereby the cup is made automatic, the grease being forced to the bearing by the weight of the cup, and other advantages are obtained, substantially as hereinafter described:

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 represents a vertical section on the line *xx* in Fig. 2 of a grease-cup embodying my invention and as applied to the bearing of a shaft. Fig. 2 is a transverse section of said cup on the line *yy* in Fig. 1.

A is the cup, which is an inverted one, its bottom being uppermost.

B is a piston arranged within the cup and serving to hold the grease E above it. This piston, which may or may not be packed, but should be sufficiently free or loose to allow of the cup by its weight sliding over it, is fitted with a downwardly-projecting tube, B', made to extend through the opening in the lower end of the cup, or freely through an opening in a cover, *b*, to said end. This tube, which opens through the upper face of the piston, and is in communication at its lower end with the bearing or part to be lubricated—as, for instance, with the bearing D' of the shaft D—serves to pass the grease to the bearing.

A rod, B², is or may be made to project downward from the upper end of the cup and within the tube B' to keep the cup from tilting. This will be found especially useful when the cup is without a lower cover, *b*. When said cover is used, then the same may be held to its place against the lower end of the cup by springs S, attached at their upper ends to the cup, and arranged to pass through perforations *b'* in the cover at their lower ends, which are constructed to form hooks or holding-points *b''*, thus converting the springs into spring-catches to hold the cover to its place, but admitting, by pressing the spring inward, of the ready detachment of the cover and lifting of the cup from off the piston. The cover *b* will serve to keep the cup from falling off—as, for instance, when applied to a moving bearing. It will also serve to exclude dust and dirt from the cup.

C is a screw in the portion of the tube B' which is below the cup to regulate the feed of grease to the bearing.

A grease-cup constructed as described will operate automatically to force the grease to the bearing, inasmuch as when the inverted cup is charged with grease the weight of the cup will force the grease to the bearing. The cup is easily filled by removing it from off the piston, which will be found very convenient in various dangerous positions or places. It can be readily inspected from time to time without climbing up or removing a top cover to ascertain if it is feeding, also whether it is empty or not, and by means of the thumb-screw in the tube the feed can be regulated so as to waste no grease, and when once regulated the cup will need no further attention till empty. Whenever the shaft or moving part to be lubricated is not in motion, the cup will stop feeding, and consequently no grease be wasted, as then there will be no sucking or drawing action of the shaft or moving part on the grease in the cup or its feed-tube.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In a grease-cup for lubricating shafts and other parts of machinery, the combination of an inverted cup, a piston therein adapted to hold a body of grease above it, and a downwardly-projecting feeding-tube in open communication at its upper end with the grease-space in the cup above the piston, whereby the weight of the cup is made to force the grease down said tube to the part to be lubricated, substantially as specified.

2. The combination of the regulating-screw

C with the feed-tube B', having an attached piston, B, and the inverted grease-cup A, essentially as shown and described.

3. The guide-pin B², in combination with the
5 feed-tube B', the piston B, and the inverted grease-cup A, substantially as specified.

4. The catches S, in combination with the

lower cover, b, the inverted grease-cup A, the feed-tube B', and the piston B, essentially as and for the purposes herein set forth.

WILLIAM SCHOENDELEN.

Witnesses:

A. SCHOENDELEN,

C. A. FICKE.