

(No Model.)

W. F. ALTHOFF & J. H. STOKESBARY.
OIL CUP.

No. 491,830.

Patented Feb. 14, 1893.

Fig. 1.

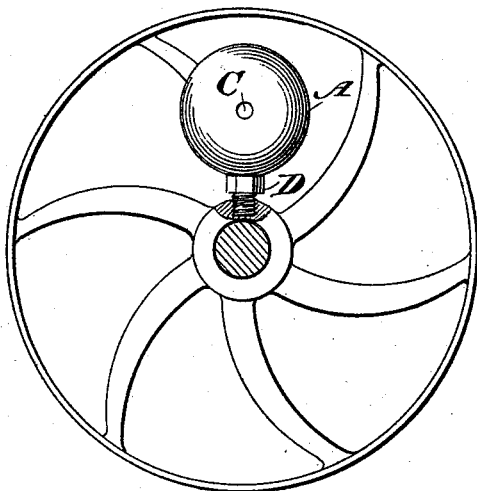


Fig. 2.

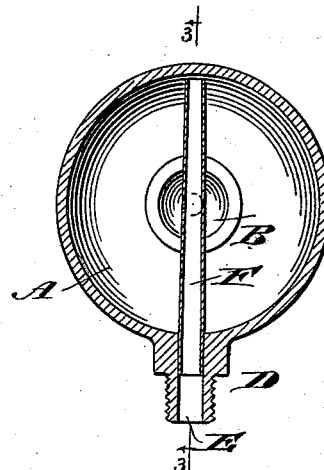


Fig. 3.

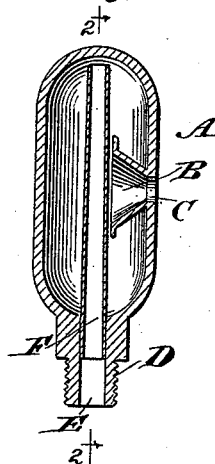


Fig. 4.

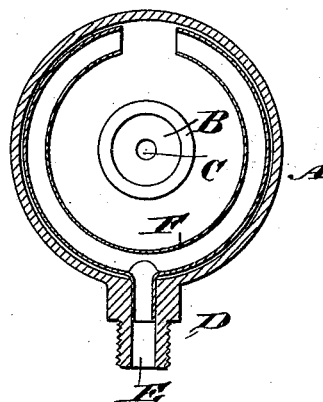
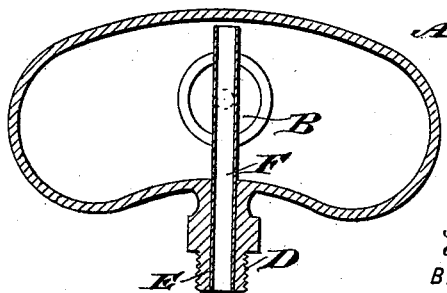


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM F. ALTHOFF AND JOHN H. STOKESBARY, OF DENVER, COLORADO.

OIL-CUP.

SPECIFICATION forming part of Letters Patent No. 491,830, dated February 14, 1893.

Application filed April 13, 1892. Serial No. 429,059. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM F. ALTHOFF and JOHN H. STOKESBARY, of Denver, in the county of Arapahoe and State of Colorado, have invented a new and Improved Oiler, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved oiler, which is simple and durable in construction, and more especially designed for use on loose pulleys and other wheels and parts, to lubricate the same in a very effective manner, and only when the part is in action.

The invention consists of certain parts and details, and combinations of the same, as will be hereinafter described and claimed.

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 all the figures.

Figure 1 is a reduced side elevation of the improvement as applied; Fig. 2 is a sectional side elevation of the improvement on the line 2—2 of Fig. 3; Fig. 3 is a transverse section of the same on the line 3—3 of Fig. 2; Fig. 4 is a sectional side elevation of a modified form of the improvement; and Fig. 5 is a similar view of another modified form of the improvement.

The improved oiler is provided with a suitably-constructed cup A, preferably, however, made flat, as shown in Fig. 3, one side of the cup being provided at its inner surface with a funnel B, the small end of which opens into an opening C, formed in the respective side of the cup and leading to the outside, as will be readily understood by reference to the drawings. The lubricant is introduced through this opening C and funnel B to the inside of the cup.

On the bottom of the cup A is formed an offset D, adapted to be secured to the hub of the wheel to be lubricated or to any other part desired to be oiled. As shown in the drawings, the offset D is formed with a screw thread screwing in the hub of the wheel, and the offset is provided with a bore E connecting the interior of the cup with the part to be oiled, that is the shaft carrying the pulley, as illustrated in Fig. 1.

In the bore E is inserted a pipe F, which may

be straight, as shown in Figs. 2 and 3, and extending in the cup A to a point about opposite the bore E, the end of the pipe terminating close to the inner surface of the cup A. As shown in Fig. 4, the pipe F is arranged in circular form in the shape of a fork, the ends terminating in the casing A approximately opposite the bore E and close to the inner surface of the cup.

When the device is applied to a loose pulley and the lubricant is introduced into the cup A, through the opening C, the funnel B within the lubricant is confined within the cup as the funnel B prevents the outflow no matter what position the loose pulley is in. As long as the pulley is stationary, the lubricant contained in the cup A cannot flow through the pipe F into the bore E to the part to be lubricated, but as soon as the pulley is set in motion the centrifugal force causes the lubricant to move to the outer end of the cup A opposite the offset D and at the inlet to the pipe F. The lubricant is thus forced into the pipe F and through the same to the part to be oiled. It is understood that the body of the lubricant thrown out into the outermost part of the cup A, will force the lubricant naturally through the pipe F to oil the bearing, and the faster the pulley revolves, the more the pressure of the body of the lubricant is on that part of the lubricant contained in the pipe F, so that an ample supply of lubricant will be forced to the bearing. When the pulley is at rest and is in the position shown in Fig. 1, that is with the cup A on the top of the hub, then the lubricant cannot pass into the pipe F, as the open end of the same is at the top in the cup A. When the pulley is turned so that the oiler is in a lowermost position then the lubricant gathers in the outer end of the cup around the end of the pipe F, but it cannot rise in the latter to the bearing. Thus, it will be seen that the lubricant is only forced to the bearing at the time the pulley is in motion, and the flow of the lubricant is proportioned according to the speed of the pulley.

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

1. An oiler provided with a cup formed at one side at the center with an inlet opening,

and a funnel arranged on the inner surface of the said side of the cup and leading with its small end into the said inlet opening, substantially as shown and described.

- 5 2. An oiler comprising a cup formed at one side at the center with an inlet opening, a funnel arranged on the inner surface of said side, and leading with its small end to the said inlet opening, an offset formed on the
10 bottom of the said cup and provided with a

bore, and a pipe engaging with one end the said bore extending through the cup and terminating at its other end opposite the said bore, substantially as shown and described.

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