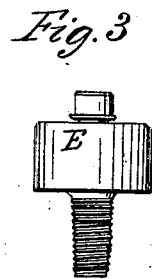
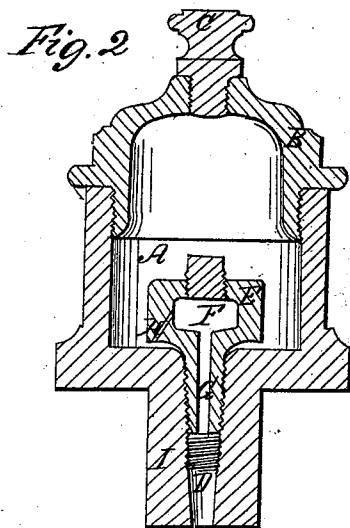
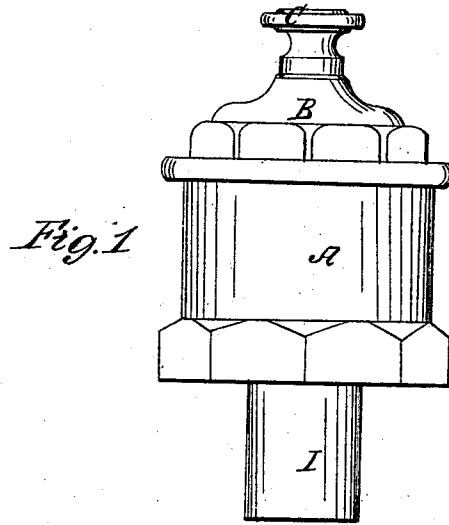


M. T. Carson.

Lubricator.

N^o 85,164

Patented Dec. 22, 1868.



Witnesses;
W. H. Burridge
Frank S. Alden

Inventor;
M. T. Carson

United States Patent Office.

M. T. CARSON, OF CLEVELAND, OHIO.

Letters Patent No. 85,164, dated December 22, 1868.

IMPROVEMENT IN LUBRICATING-CUPS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, M. T. CARSON, of Cleveland, in the county of Cuyahoga, and State of Ohio, have invented a certain new and improved Oil-Cup; and I do hereby declare that the following is a full and complete description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the cup.

Figure 2, a vertical transverse section.

Figure 3, a detached section.

Like letters of reference refer to like parts in the different views.

The nature of this invention consists in so constructing an oil-cup that it shall supply the journal continuously and definitely with oil by capillary action while the said journal is in motion, and none when it is at rest.

A, fig. 1, represents the oil-chamber or reservoir of the cup, to which is fitted a cap, B, in the upper side of which is fitted a finger-screw, C, which closes on opening, through which the oil is poured into the cup.

The bottom of said cup is pierced by an opening, D, in which is fitted a screw-plug, E; a detached view of which is shown in fig. 3. In the head of said plug is a chamber, F, which communicates with the opening D, by the conduit G.

This chamber is also put in communication with the chamber A by the small conduit H.

Having thus described the construction and arrangement of the cup, the practical operation of the same is as follows:

The cup is screwed into the cap of the journal-box

by means of the stem I. The reservoir A is now filled with oil, which finds its way out to the journal through the small conduit H, into the chamber F, thence down, through the bore G and stem I, to the journal, in regular and constant quantities.

In consequence of the very small size of the bore of the conduit H, the oil passes very slowly through it, and that by capillary attraction, assisted by a partial vacuum caused by the constant though slow consumption or waste of the oil on the journal. This flowing out of the oil takes place only during the movement of the journal, and entirely ceases when the machinery is at rest; hence there is no waste or consumption of oil during the rest of the machinery, and, when in motion, the supply is constant, and in such quantity that will supply the demand without an excess or oversupply.

By the use of this cup it will be obvious that there is a large saving in the amount of oil used for lubrication, there being applied to the journal no oil in excess of that actually required, and which is supplied, drop by drop so long as the machinery is in motion—a practical fact, not obtained by the use of any other kind of a cup.

What I claim as my improvement, and desire to secure by Letters Patent, is—

The screw-plug E, provided with the chamber F, openings or conduits H and G, in combination with an oil-cup, substantially as set forth.

M. T. CARSON.

Witnesses:

W. H. BURRIDGE,
FRANK S. ALDEN.