(No Model.)

W. C. JOSLIN.

AXLE LUBRICATOR.

No. 389,929. Patented Sept. 25, 1888.

Fig. 1.

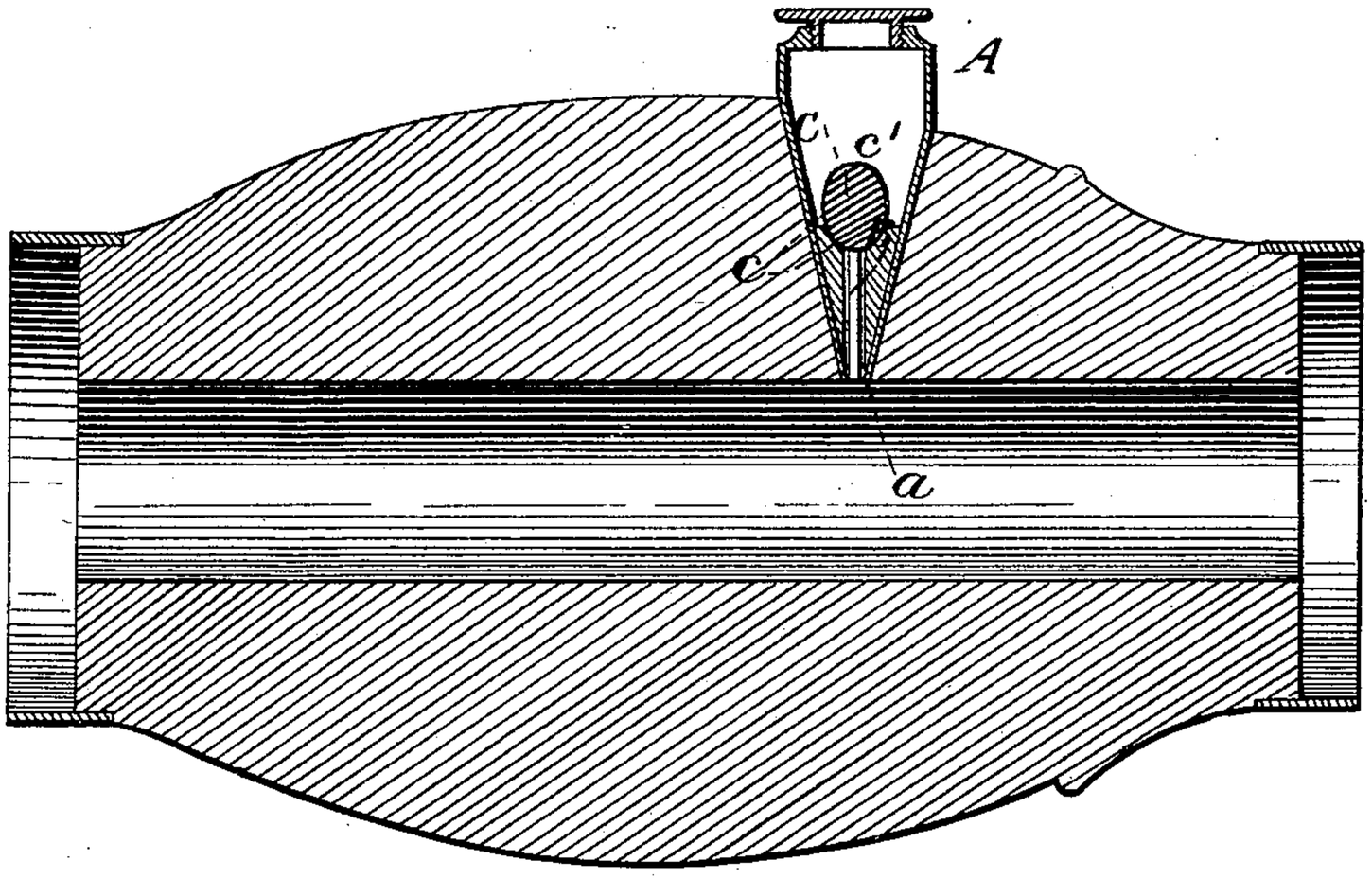

Fig. 2.

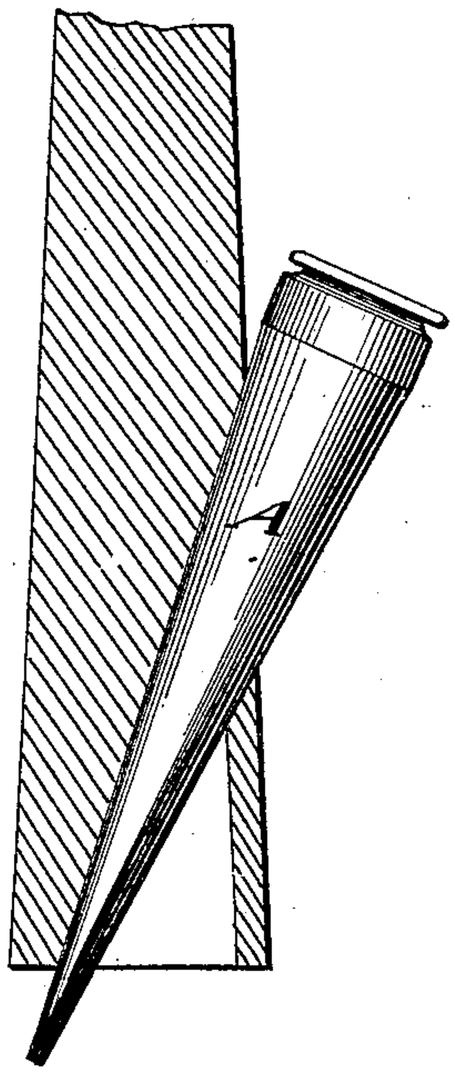

Fig. 3.

Witnesses.
A. Ruppert.
Wm. C. Hamilton

Inventor:
Wm. C. Joslin
Per
Thomas P. Simpson
atty.

UNITED STATES PATENT OFFICE.

WILLIAM C. JOSLIN, OF PUTNAM, CONNECTICUT, ASSIGNOR OF ONE-HALF TO SIMON PARKHURST AND M. J. JOSLIN, OF SAME PLACE.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 389,929, dated September 25, 1888.

Application filed May 18, 1888. Serial No. 274,265. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. JOSLIN, a citizen of the United States, residing at Putnam, in the county of Windham and State of Connecticut, have invented certain new and useful Improvements in Grease-Lubricators; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to make, for vehicles, a self-lubricating device wherein grease may be employed as the lubricant.

Figure 1 of the drawings is a vertical longitudinal section showing the lubricator applied directly to the hub; Fig. 2, a similar view showing it applied to a hollow spoke; and Fig. 3, a detail view of my plunger, which acts as a valve and also as an agitator to keep the grease worked up, while its stem serves as a lubricant-transmitter.

In the drawings, A represents the grease-holder, which is preferably made conical—largest at the upper end and tapering nearly to a point at the lower end, wherein is the small hole *a*, through which passes the stem B of the double cone valve C. When the end of said stem rests upon the axle of the vehicle, the valve fills its seat in the lower part of the holder A and prevents any escape of grease; but when the wheel rotates the valve C works up and down in the grease, keeping the same, by friction and pressure, in a sufficiently fluid state for transmittal to the axle.

It will be observed that the valve C has two cones, *c c'*, placed base to base, the former to fit as a valve in the lower end of the grease-holder, and the latter, *c'*, to ascend without unnecessary resistance through the grease while exercising a lateral pressure upon it. In practice I find that it is not only cheaper than oil, but for wagons and heavy vehicles the grease feeds more gradually and with much less waste.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

A grease-lubricator tapering toward the lower end and provided with a double coned piston, the stem of said piston passing through the lower small end of the cone, as shown and described.

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

WILLIAM C. JOSLIN.

Witnesses:
MUNROE J. JOSLIN,
WM. HOLMES MEALEY.