

J. U. SUMPTER.  
Car-Axle Box.

No. 226,369.

Patented April 6, 1880.

Fig. 1.

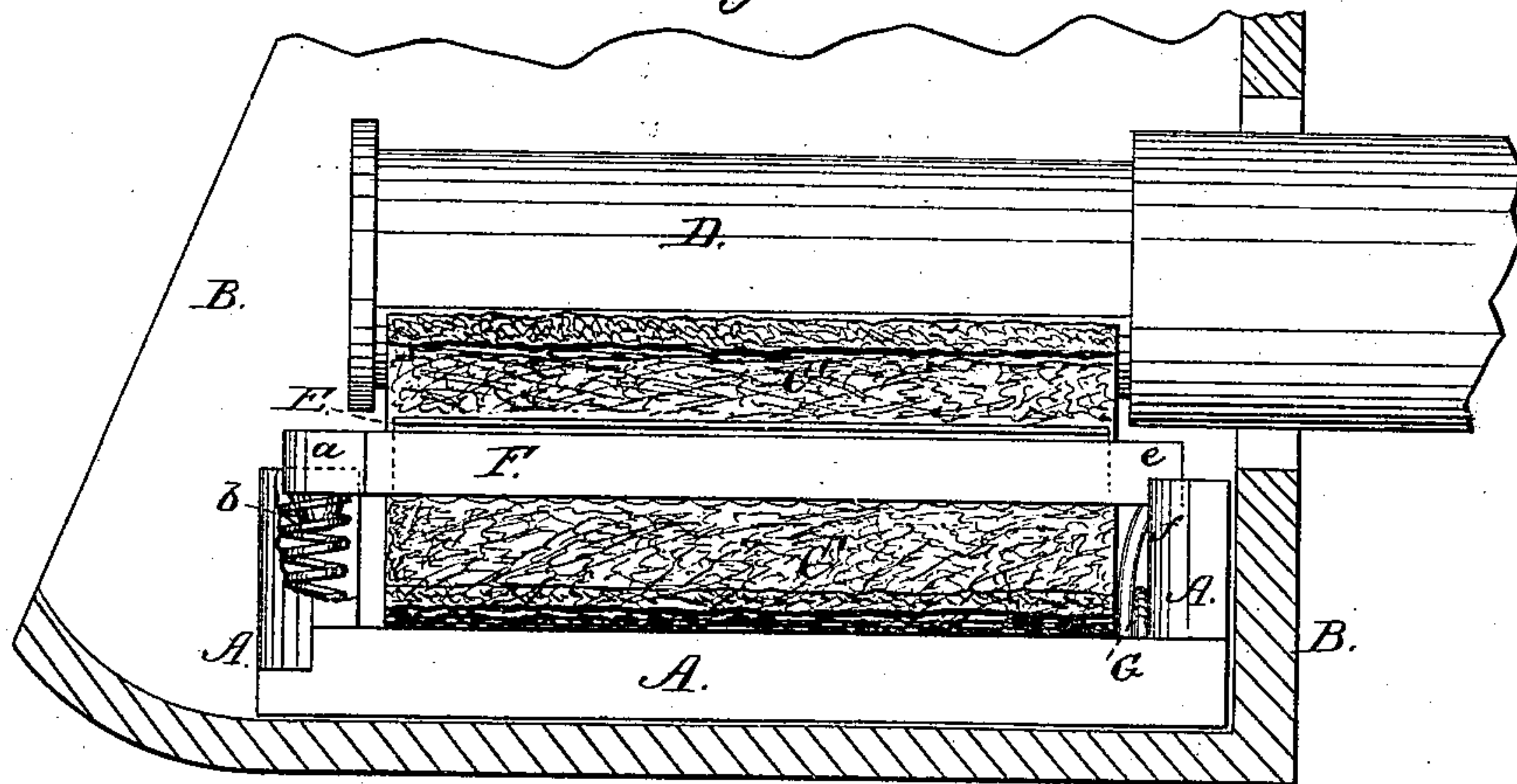


Fig. 2.

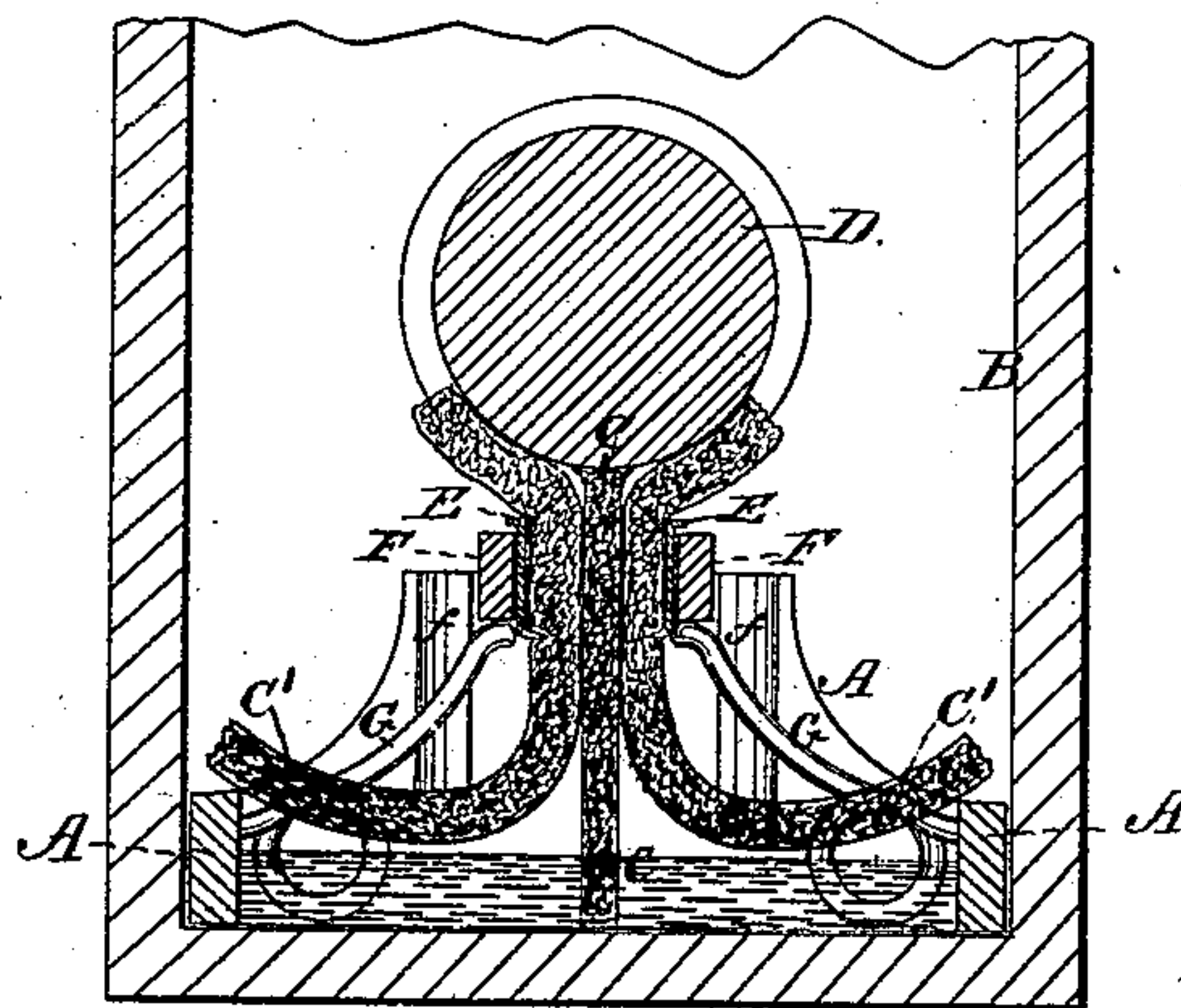
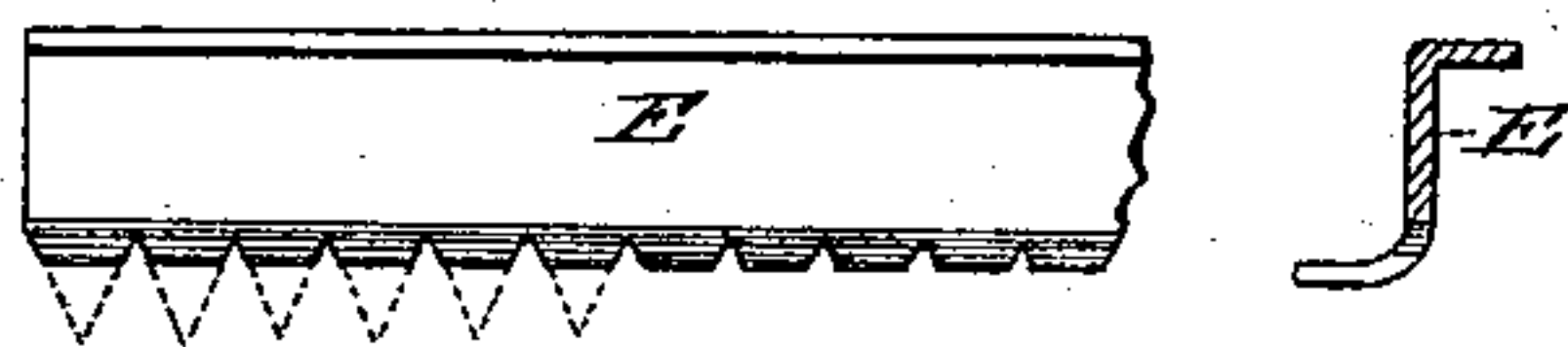


Fig. 3.



WITNESSES:

*W. W. Hollingsworth*  
*Amos W. Hart*

INVENTOR:

*J. U. Sumpter*

BY

*Robert L.*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOHN U. SUMPTER, OF LYNCHBURG, ASSIGNOR OF ONE-HALF OF HIS RIGHT  
TO LORENZO D. LORENTZ, OF CHRISTIANSBURG, VIRGINIA.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 226,369, dated April 6, 1880.

Application filed February 18, 1880.

*To all whom it may concern:*

Be it known that I, JOHN U. SUMPTER, of Lynchburg, in the county of Campbell and State of Virginia, have invented certain new and useful Improvements in Axle-Lubricators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention is an improvement in the class of axle-journal lubricators whose action depends upon capillary attraction, the vehicle for conveying the lubricant to the journals being fibrous material, such as felt, tow, cotton, or fabric of some kind.

My invention relates to the means for holding the fibrous material and supporting it in contact with a journal, as hereinafter described.

In the accompanying drawings, Figure 1 is a vertical longitudinal section of a portion of a car-axle box, showing my improved lubricator. Fig. 2 is a vertical cross-section of the same. Fig. 3 is a side view and cross-section of one of the toothed plates for holding the sheets of felt or other material.

A represents a metal frame, which is placed on the floor of a car-axle box, B, which constitutes an oil holder or reservoir. C indicates the sheet of felt or other fibrous material constituting the vehicle for conveying the lubricant from such reservoir to the axle-journal D. C' C' are larger felt sheets, which serve as wipers to remove superfluous oil from the journal D. Said felt sheets C C' C' are held by toothed metal plates E E in a slotted bar, F, which has at one end a projecting portion or arm, *a*, that enters a vertical groove, *b*, in one end of frame A and rests on a spiral spring placed in said groove *b*, while the other end, *e*, is square and rests between vertical guides *f* on the free ends of coiled-wire springs G, that project inward from the side bars of frame A, to which they are permanently attached.

The lower edges of plates E E are bent inward and provided with teeth to hold the felt sheets between them, while their upper edges are bent outward and rest on the bar F.

By this construction the toothed plates may be easily applied or removed, and the felt may be easily and quickly adjusted higher or lower,

as required by wear of the part in contact with the journal.

The groove *b* and parallel ribs *f* of frame A serve as guides for bar F, in which it has free vertical movement, being pressed upward by the springs G, so as to insure constant contact between the felt C and journal D.

The two outer felt sheets, C' C', are made wider and thicker than the middle one, C, so that they extend upward on the sides of the journal D, while the third sheet, C, extends vertically between the lower side of the journal and the floor of the reservoir B, so that its lower edge is always immersed in oil.

By this construction and arrangement of parts the lubricant is all taken up and conveyed to the journal D; yet the journal does not soon become gummed, since the wipers C' C' continually remove any portion of oil in excess, and also dust or cotton-waste, which tend to adhere to the journal.

What I claim is—

1. In a journal-lubricator, the plates for holding the fabric or lubricant-conveyer, the same having an inward-turned flange on the lower edge, in combination with a bar or frame for supporting the same in the box B, for containing lubricant, substantially as and for the purpose described.

2. The combination, with the slotted bar and spring-supports therefor, of the felt-holders, consisting of plates whose upper edge is bent outward and inner edge bent inward and provided with teeth, as shown and described, for the purpose specified.

3. The felt-holder consisting of the oblong sheet-metal plate having its upper and lower edges bent in reverse directions, and the lower one toothed, as and for the purpose specified.

4. The combination of the bar F, having end projection or arm, *a*, the felt attached thereto, and the frame A, having vertical groove and guide-ribs, the spiral spring resting in said groove, and the coiled springs fixed in and projecting inwardly from the side bars of said frame, as shown and described.

The above specification of my invention signed by me this 5th day of February, 1880.

JOHN U. SUMPTER.

Witnesses:

P. G. AVERETT,  
JNO. W. CHILDS.