(No Model.)

E. H. BENNERS.

AXLE LUBRICATOR.

No. 478,041. Patented June 28, 1892.

Fig. 2.

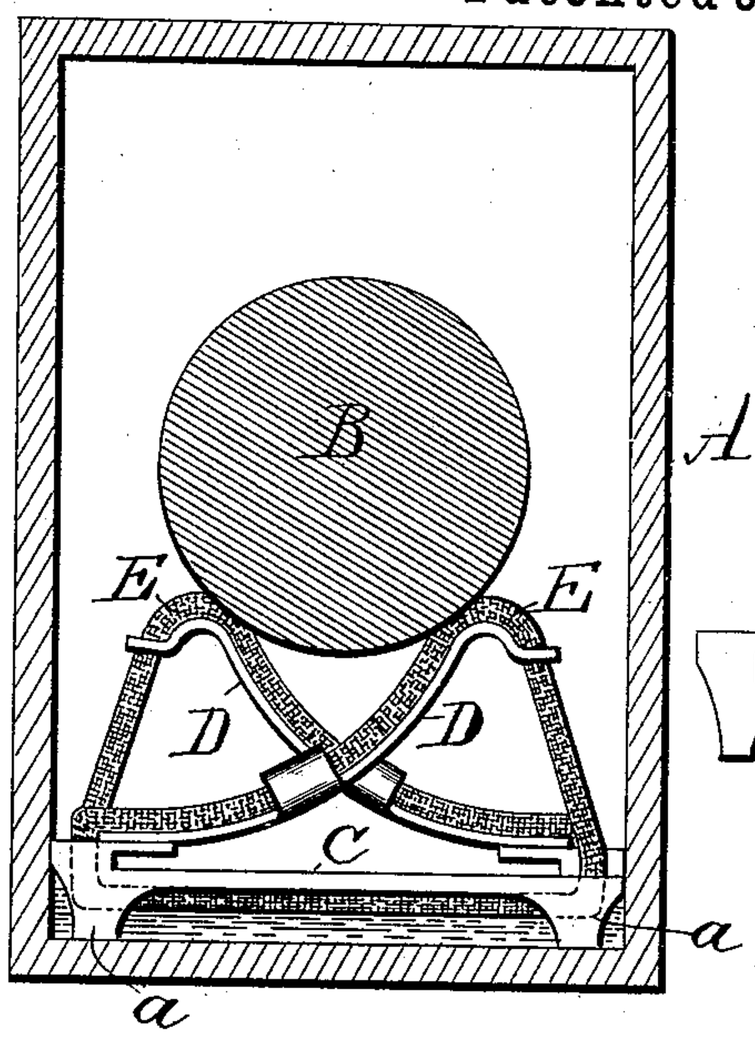


Fig. 4.

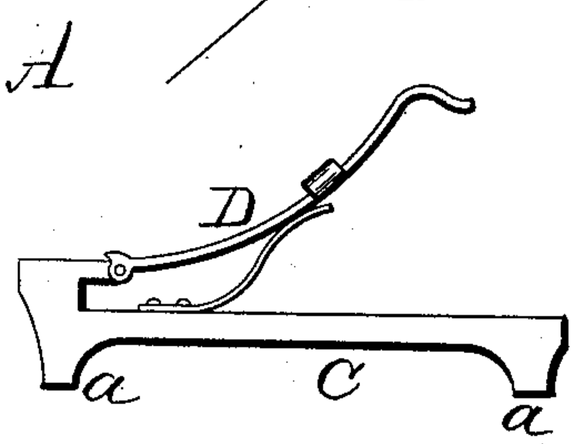
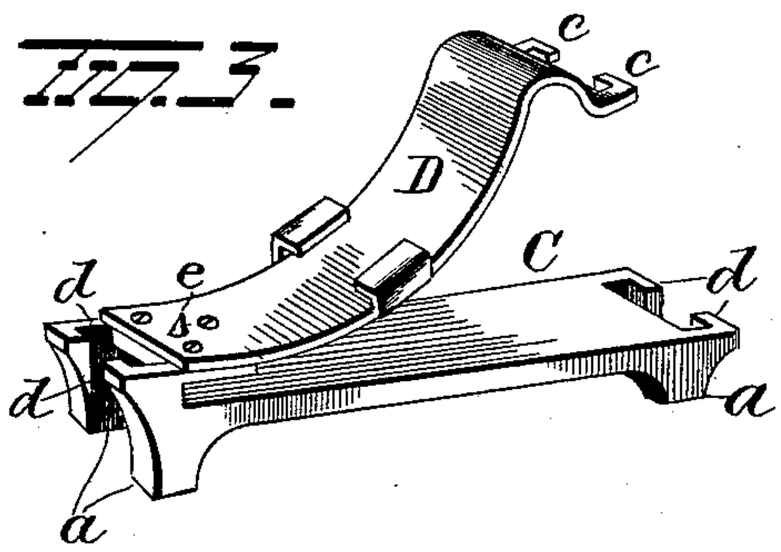


Fig. 3.



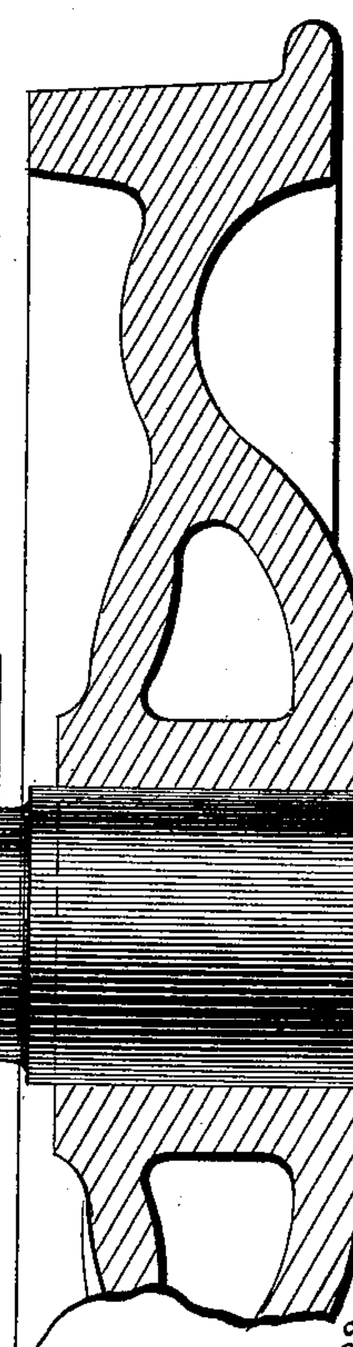
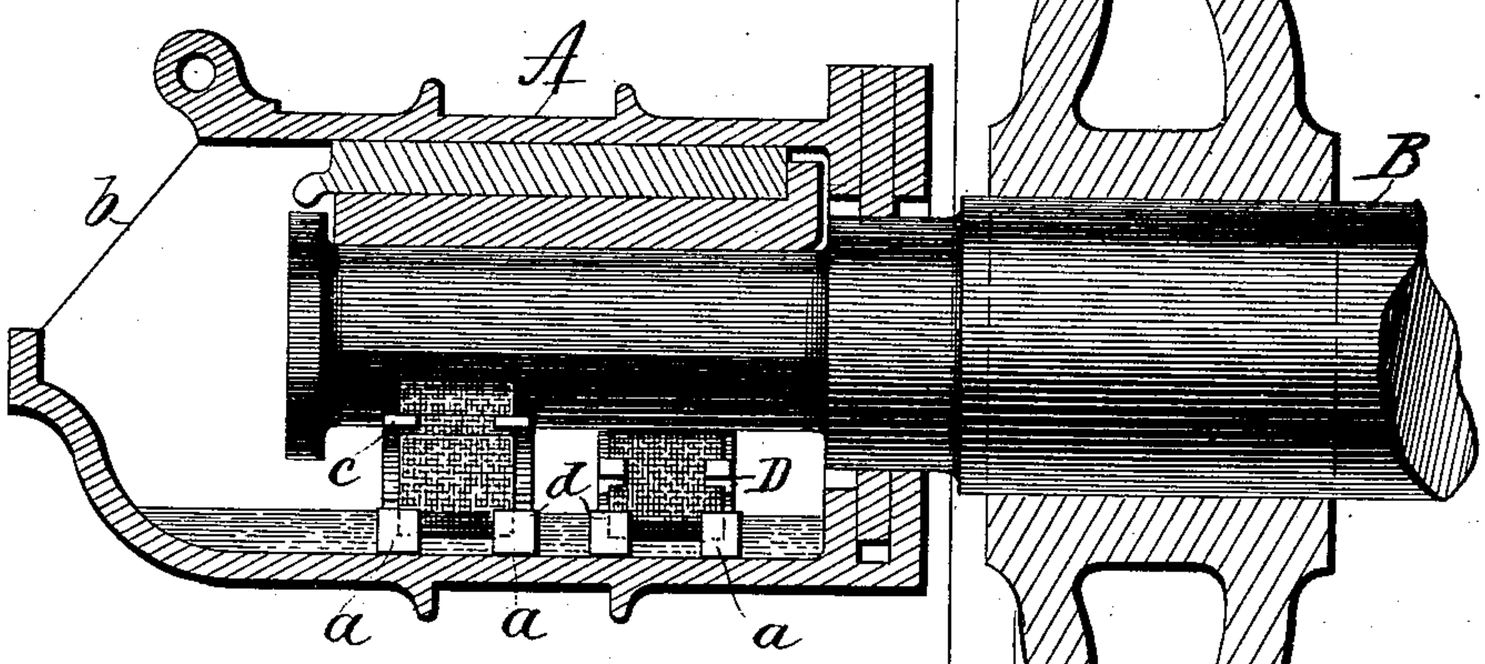


Fig. 1.



Witnesses
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UNITED STATES PATENT OFFICE.

EDWIN H. BENNERS, OF ELIZABETH, NEW JERSEY.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 478,041, dated June 28, 1892.

Application filed January 7, 1892. Serial No. 417,279. (No model.)

To all whom it may concern:

Be it known that I, EDWIN H. BENNERS, of Elizabeth, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Axle-Lubricators; and I do hereby 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.

My invention relates to an improvement in axle-lubricators, and more particularly to that claim in which felt or wicking is partly submerged in lubricating-oil, the upper end of the felt or wicking being yieldingly held in contact with the journal to be lubricated.

In a majority of the lubricators designed for car-axles the frame carrying the wicking or felt is of such size that it is sometimes difficult and frequently impossible to insert it in the box under the journal. In other devices short lengths of wicking or felt are used, and as portion of the wicking in contact with the journal soon becomes partly carbonized or glazed and prevents the passage of the oil to the journal it is necessary to frequently take out the wicks and substitute others.

The object of my invention is to provide frames for carrying endless belts of felt or wicking adapted to be introduced through the open end of the box under the journal and hold the wicking or felt in yielding contact therewith.

With these ends in view my invention consists in the parts and combinations of parts, as will be more fully explained, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in longitudinal section through a car-axle box, showing a pair of lubricators in position therein. Fig. 2 is a view in transverse section of the same. Fig. 3 is a view in perspective of one of the frames removed, and Fig. 4 is a view of a modified form of device.

A represents the axle-box, of ordinary form, and B the axle.

C represents a base, preferably made of malleable iron and mounted on four short legs *a*, which latter elevates the base C sufficiently high to permit the wicking to pass under same. This base is sufficiently narrow to be introduced sidewise through the opening *b* and under the outer end of the journal and is provided at one end with a raised seat, to which is secured the spring-metal bearing-plate D. This plate D is provided preferably at its free end and at one or more points along its side edge with lips or guides *c*, which latter hold the felt or wicking E in place and prevent lateral displacement of same. The felt or wicking E is in the form of an endless belt and rests on the top face of the plate D and passes down between the legs *a* and under base C. The plate D yieldingly holds the wicking or felt in contact with the journal at one side of the vertical center of the latter, and another frame similarly constructed carries another endless wick or felt on the opposite side of the vertical center and when placed side by side within a journal-box lubricate the larger portion of the journal.

By employing an endless strip of felt or wicking it can be adjusted, without necessarily removing it from the box, so as to present a new or unglazed surface, and thus not only save the time required for adjusting new strips of felt, but also save considerable in the cost of the wicking or felt.

Instead of employing spring-strips, as shown in Figs. 1, 2, and 3, I can hinge the plate D to the base and employ a spring resting on the base and bearing against the plate for yieldingly holding the plates in contact with the journal.

By employing guides *d* on the end of the base, and also on the plate, as shown, the felt or wicking is prevented from lateral displacement, and, if desired, the endless strip can fit the frame sufficiently loose so as to be moved longitudinally by frictional contact with the bearing.

If desired, instead of using guides, pins *e* or similar devices adapted to pass through the wicking or felt could be used with good results. With such devices, however, there would be no chance for longitudinal movement of the wicking or felt.

It is evident that many slight changes might be resorted to in the relative arrangement of parts herein shown and described without departing from the spirit and scope of my invention, and hence I would have it

understood that I do not confine myself to the exact construction of parts herein described; but,

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

1. The combination, with a receptacle and a plate fitted therein, said plate having recessed ends and furnished with legs on the bottom, of a yielding plate connected to the former plate and a wick passed over this yielding plate through the recessed ends and between the legs, substantially as set forth.

2. The combination, with a receptacle and a plate fitted therein, said plate having recessed ends, of a yielding plate connected with the former plate and a wick passed over the yielding plate and through the ends of the main plate, substantially as set forth.

3. The combination, with a base-plate having guides in its ends, of a yielding plate connected at one end to the base-plate and provided with guides at its free end and an endless wick passed over the yielding plate and through the guides, substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWIN H. BENNERS.

Witnesses:
A. W. BRIGHT,
C. S. DRURY.