

J. SIDEBOTHAM.
CAR AXLE-BOX LUBRICATOR.

No. 171,182.

Patented Dec. 14, 1875.

Fig. 1.

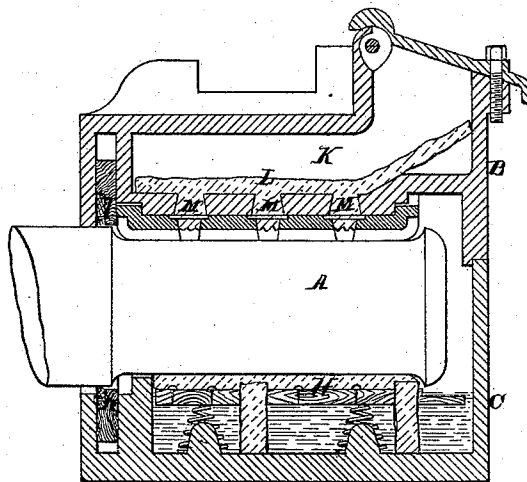


Fig. 3.

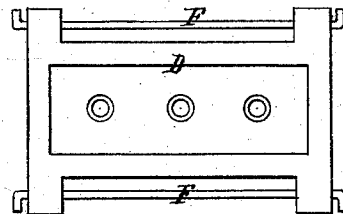
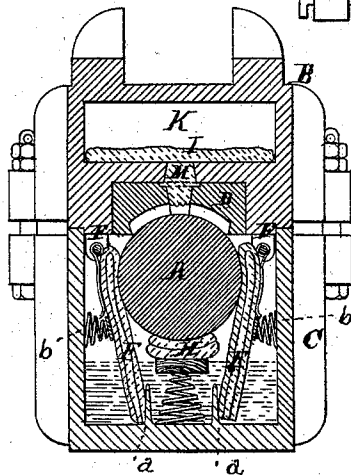


Fig. 2.



Witnesses.

Otto Hufeland.
Char. Wahlen.

Inventor.

James Sidebotham

per
Karl Lentwood & Hauff.
Attys.

UNITED STATES PATENT OFFICE

JAMES SIDEBOTHAM, OF CAIRO, EGYPT.

IMPROVEMENT IN CAR-AXLE-BOX LUBRICATORS.

Specification forming part of Letters Patent No. **171,182**, dated December 14, 1875; application filed October 4, 1875.

To all whom it may concern:

Be it known that I, JAMES SIDEBOTHAM, of Cairo, Egypt, have invented a new and useful Improvement in Lubricators for Axle-Boxes, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 is a longitudinal section. Fig. 2 is a transverse section of an axle-box.

Similar letters indicate corresponding parts.

This invention has for its object improvements in the lubricating arrangements of axle-boxes for railway rolling-stock; and is designed to simplify the lubricators, and to insure the perfect and continuous lubrication of the axle-journals.

The invention consists in the combination, with the journal-box, of a depending flap, hung upon pins or cross-bars at one or both sides of the journal, and provided with springs which press them in contact with said journals, the flap being made of absorbent material, and having the ends dipping into an oil-reservoir in the lower part of the axle-box in such manner as to convey the oil up to the journal, and effectually lubricate it, as hereinafter more fully set forth.

In the drawing, the letter A designates the journal of the axle. B is the upper part of the axle-box, and C is the lower part. D is the bearing resting on the journal. E E are the flaps, sheets, or webs of felt or other suitable material for lubricating the journal, one being suspended on each side of the journal, and attached to the bearing by the pins F F. The lower edges or ends of the flaps or webs hang down into the reservoir of oil in the lower part of the axle-box to receive and convey the oil to the journal by capillary action. The flaps or webs here shown are made each in one piece, doubled on itself and stitched together, but they may be in a single sheet. Ribs *a a* are cast on the sides of the axle-box to steady the flaps or webs, and keep them in place, forming stops against the action of the springs *b b*.

A lubricating-pad, H, may be applied below the journal in conjunction with the side flaps. It is supported on springs from the bottom of the axle-box. A shield or diaphragm, I I, coated with felt on one or both sides, is applied at the back of the axle-box to prevent oil escaping, or dust entering the box. A supplementary grease-chamber K K is here shown, but it is only proposed as an auxiliary to the oil lubrication, and to hold a supply of grease, for the purpose of being kept in reserve for use in case of accident to the lubricating-flaps, or to the lower part of the axle-box, the grease being prevented from descending on the journal so long as oil lubrication is in action, by a layer of felt or other material, L, laid on the floor of the grease-chamber, so as to cover the grease-channels M M, or the grease-channels may be stopped up by plugs. Oil may be introduced into the axle-box by a suitable opening, which will be closed by a plug. Instead of securing the pins F of the side flaps E in lugs cast on the top B of the axle-box, the bearing D may be made in the form shown in Fig. 3, so that the pins F can be readily secured therein.

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

In combination with a journal-box, B C, and the journal A, the depending flaps E E, secured to the cross-bars F F, supported in lugs formed on the upper part of the box, the spiral springs *b* bearing against the said flaps and the sides of the lower part C, and the stops or projections on the bottom of said part C, the whole constructed and arranged to operate substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal.

JAMES SIDEBOTHAM. [L. S.]

Witnesses:

A. D. COMANOR,

ALEX. ELIAS.