(No Model.)

# R. FAAS.

## CAR AXLE LUBRICATOR.

No. 414,029. Patented Oct. 29, 1889.

*Fig. 1.*

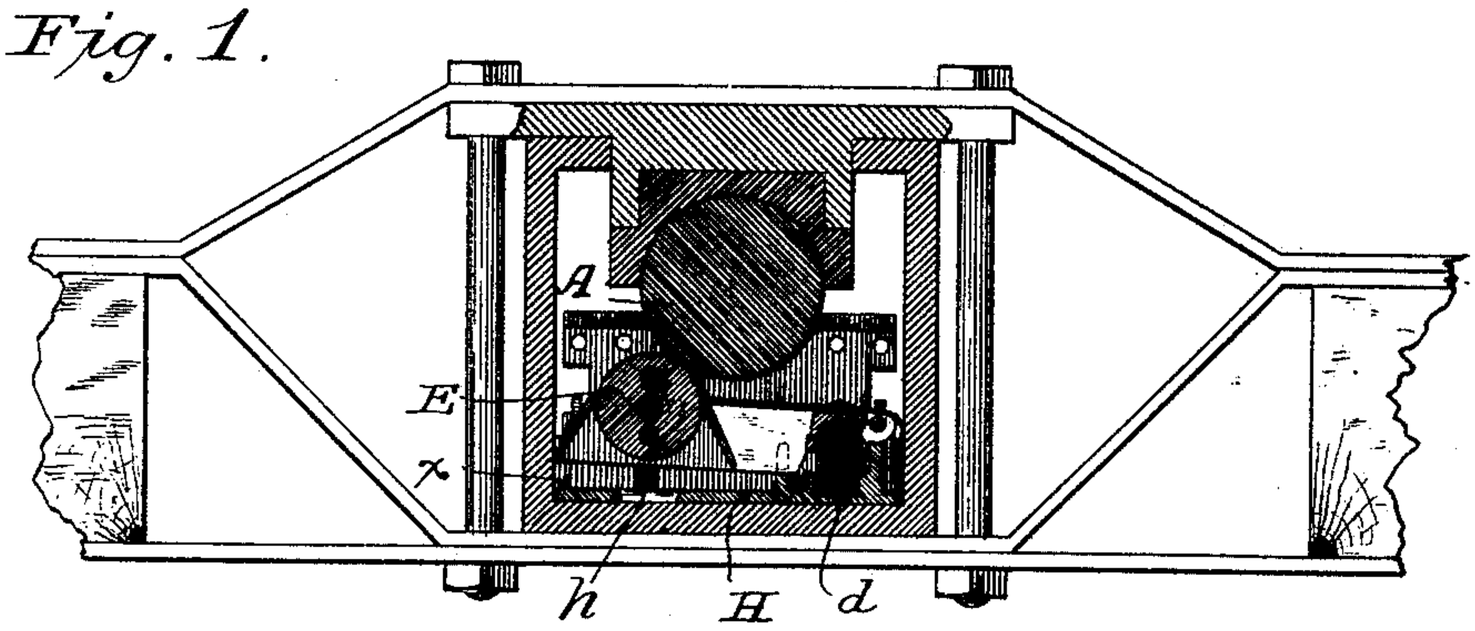



*Fig. 2.*

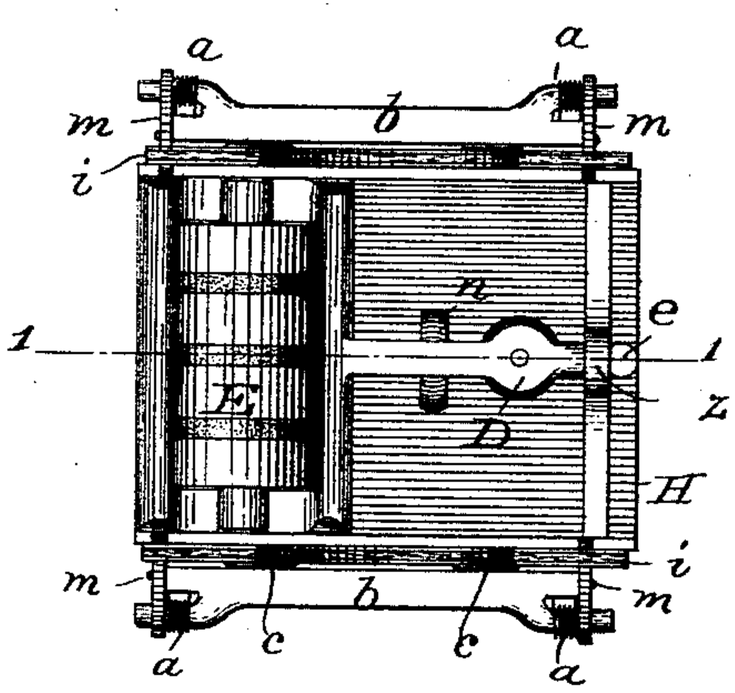



*Fig. 3.*

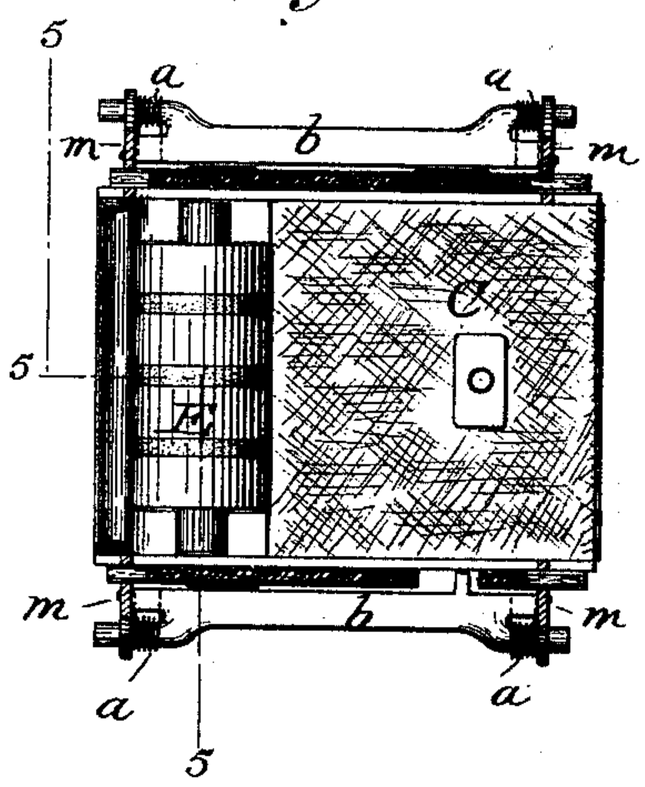



*Fig. 4.*

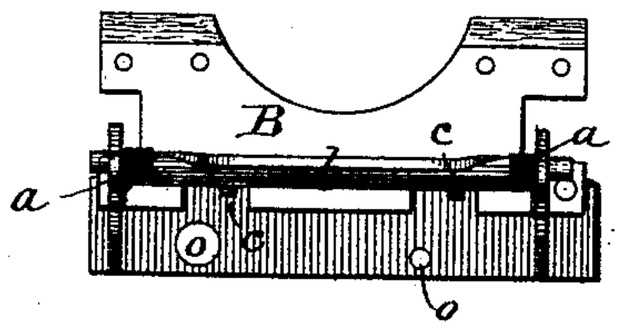
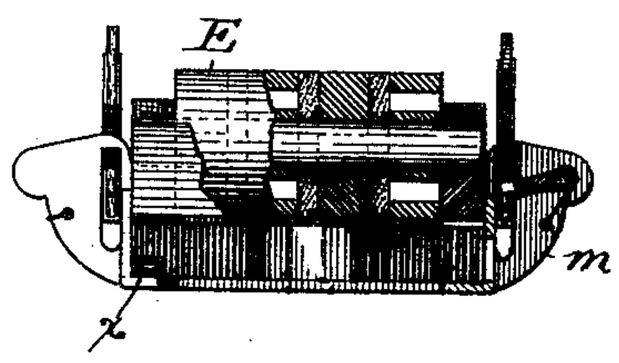



*Fig. 5.*

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# UNITED STATES PATENT OFFICE.

RUDOLPH FAAS, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE STANDARD CAR AXLE LUBRICATOR COMPANY, OF SAME PLACE.

## CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 414,029, dated October 29, 1889.

Application filed March 30, 1889. Serial No. 305,444. (No model.)

*To all whom it may concern:*

Be it known that I, RUDOLPH FAAS, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and additional Improvement in Car-Axle Lubricators, of which the following is a specification.

My invention relates to that class of car-axle lubricators in which a lubricating-roller engages with the car-axle journal.

The objects of my invention are, besides providing a continuously-lubricated axle-journal and preventing waste, to exclude dust, sand, or other foreign substances from the journal and the lubricant, thereby removing one of the causes of friction and heated journals.

I attain the objects of my invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of a car-axle on line 1, Fig. 2, showing my device therein. Fig. 2 is a top view of the device with the canvas cover removed. Fig. 3 is a similar view with the canvas cover in place. Fig. 4 is a side elevation of the shield. Fig. 5 is a sectional view of the device on line 5, Fig. 3.

Similar letters refer to similar parts throughout the drawings.

A square metal base made to fit in a car-axle box, with the perforations *o o* in the sides and partially open (*h*, Fig. 1) on the bottom underneath the roller E, constitutes the frame of my device.

As in my former invention, for which I received Letters Patent No. 389,373, dated the 11th day of September, A. D. 1888, I suspend the roller E, journed in a malleable-iron frame, on the end of the tongue or bar D, which, having a hook *e* on the end opposite the roller E entering the eye erected on the base, rests on the spiral spring *d* and elevates the roller E, so that it at all times engages with the car-axle journal and serves it with the oil from beneath, as set forth more particularly in the specification and Letters Patent above mentioned. The base H, however, differs materially from that mentioned and described in said Letters Patent, as will be noticed in the illustrations. The base H is cast in one piece with the sides *i i*, as shown, the bottom of the base having an opening *h*, Fig. 1, and the sides perforated at *o o*, for the purpose of permitting the oil to flow to and from the roller. The ends are also partially closed. On the sides *i i* of the base H, I place the brackets *m m*, which serve as a bearing for the flat metal bars *b b*, and which, being suspended by the outer edges, are maintained or supported in a level position by means of two spiral springs *a a*, affixed to the brackets *m m*. The bars *b b* provide a yielding support for the vertical brass shield B when resting upon the inner side of the metal bars *b b* and against the sides *i i* of the base H. The vertical shield B is tipped with leather, canvas, felt, or any other firm yielding material, and extends up and serves as a collar to the car-axle journal for the purpose of excluding sand, dust, or other substances, and effectually covers the apertures in the sides of the car-axle box. The springs *a a* relieve the shield B from the pounding of the axle-journal. The shield B is also allowed to play longitudinally to permit it to avoid the violent movement of the journal, caused by the sudden starting and stopping of the car.

As in my former invention, I use the canvas cover C to inclose and protect the lubricant, as well as prevent its waste by serving the journal too freely by the rapid revolution of the roller. The canvas also answers as a wick by coming in contact with the roller, serves it with oil when the quantity in the box is insufficient to reach the roller, and when the oil is completely exhausted the heat generated by the friction causes the canvas to smoke and smell, giving warning that the oil needs replenishing.

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

1. In a car-axle lubricator, the combination of the base H, sides *i i*, brackets *m m*, forming bearings for the bars *b b*, supported by the springs *a a*, affixed to the brack-

ets *m m*, and the vertical metal shield B, tipped with leather, canvas, or other firm yielding material, as and for the purpose above specified.

2. The combination of the metal bars *b b*, springs *a a*, brackets *m m*, and metal shield B, tipped with leather, canvas, or other yielding material, as and for the purpose above specified.

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