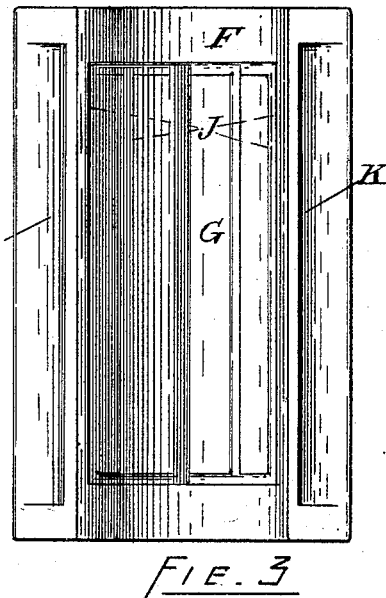
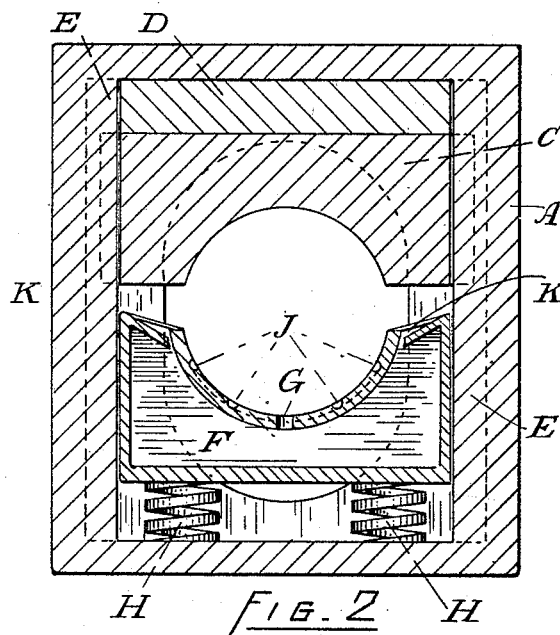
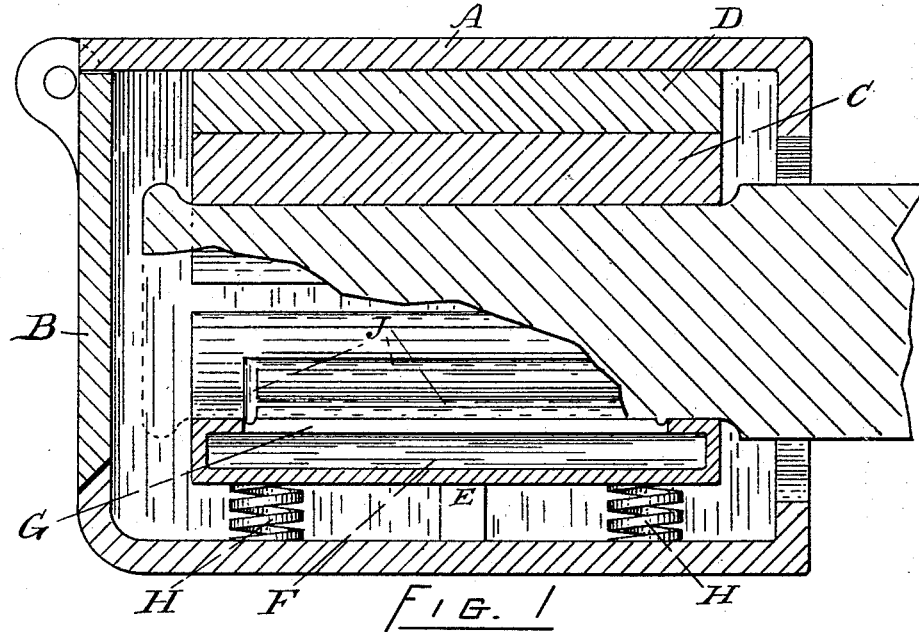


(No Model.)

E. BEST.  
CAR AXLE BOX.

No. 418,487.

Patented Dec. 31, 1889.



Witnesses.

B. Grison.  
Art. Leclair.

Inventor.  
Edward Best,  
By J. Courville  
att

# UNITED STATES PATENT OFFICE.

EDWARD BEST, OF CARLETON PLACE, ONTARIO, ASSIGNOR OF ONE-HALF TO  
WILLIAM PRENTER, OF OTTAWA, CANADA.

## CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 418,487, dated December 31, 1889.

Application filed June 17, 1889. Serial No. 314,619. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD BEST, a citizen of the Dominion of Canada, residing at Carleton Place, in the county of Lanark and Province of Ontario, Canada, have invented certain new and useful Improvements in Car-Axle Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention, which will be hereinafter fully set forth and claimed, relates to car-axle boxes; and the object is to provide an oiler for railway-car axles that will work automatically, giving a continuous and sufficient supply of oil to the bearing so long as the axle is moving, that will also be simple in its parts, admitting of a strong construction, and that will not be likely to get out of working order.

It consists, essentially, in the usual outer case or box, a removable top bushing and key, and an inclosed oil-vessel, of which the top wall is depressed to form a circular recess, bored or otherwise fitted so as to lie closely against the under side of the axle-bearing, against which it is held by strong springs, and rising around the sides of the axle as high, or nearly as high, as the center of the axle, at which point the oil-vessel is supplied with oil. The oil-vessel is provided with gutters for catching the surplus oil, with creases for giving an efficient distribution of the oil, and with an opening through which the oil rises against the axle, and this keeps it constantly and perfectly lubricated.

In the accompanying drawings, which illustrate my invention, Figure 1 is a longitudinal section of my improved axle-box with a portion of the axle in place. Fig. 2 is a transverse section on line *x x*. Fig. 3 is a plan view of the oil-vessel.

The outer case A is simply the ordinary plain-sided box that is commonly used for this purpose. An opening is made in its inner side for the entry and vertical play of the axle. The outer side of the box is provided with the hinged door B, through which

access is had to the inside for refilling the oil-vessel or other purposes. The top bushing C is set in place over the axle and between the shoulders of its bearing, and over this bushing is placed the fillet D, which is kept from sideward motion by the ribs E, which are formed on the inner surfaces of the case A. The oil-vessel F is preferably made nearly the whole length of the bearing, and has its oil-escape opening G made to extend as much as possible along its length, by which means the entire length of the axle-bearing is equally supplied with oil. When the oil-vessel is filled, the oil extends well up on each side of the axle, so that its gravity will insure an outward pressure through the opening G. The oil-vessel is held up against the axle by the springs H. Oil-creases J are made in the bearing-surface of the oil-vessel, by which means the supply of oil is more evenly distributed around the axle. It will be seen on reference to Fig. 1 that the channels or oil-creases J extend both longitudinally and transversely of the oil-vessel. This insures the complete distribution of the oil to the bearing-surfaces. The oil-gutters K, which are made in the highest parts of the vessel, catch any superfluous oil that might drip from the top bushing, and being open at the bottom allow the oil to pass from them into the lower part of the vessel.

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

1. The oil-vessel for an axle-lubricator, provided with the concave top having the opening therethrough for the emission of the lubricant, the said box provided with the downwardly-sloping side edges projecting beyond the axle, and with openings therethrough for the entrance of the lubricant, substantially as described.

2. The oil-vessel for an axle-lubricator, having the concave top and opening for the escape of the oil, and the projecting side edges, said edges formed with the downwardly-inclined lips and with the oil-admission openings.

3. The oil-vessel for an axle-lubricator, provided with the concave top having the chan-

nels extending transversely and longitudinally of the vessel, whereby the complete distribution of the oil is effected.

- 5 4. The combination, in a car-axle box, of the outer case A, having the ribs E, with the oil-vessel F, having the opening G, oil-creases J, gutters K, and springs H, substantially as shown and described.

In testimony whereof I have signed in the presence of the undersigned witnesses.

EDWARD BEST.

Witnesses:

ART. LECLAIRE,  
B. GRISON.