(No Model.)

E. BEST.

CAR AXLE BOX.

No. 426,904. Patented Apr. 29, 1890.

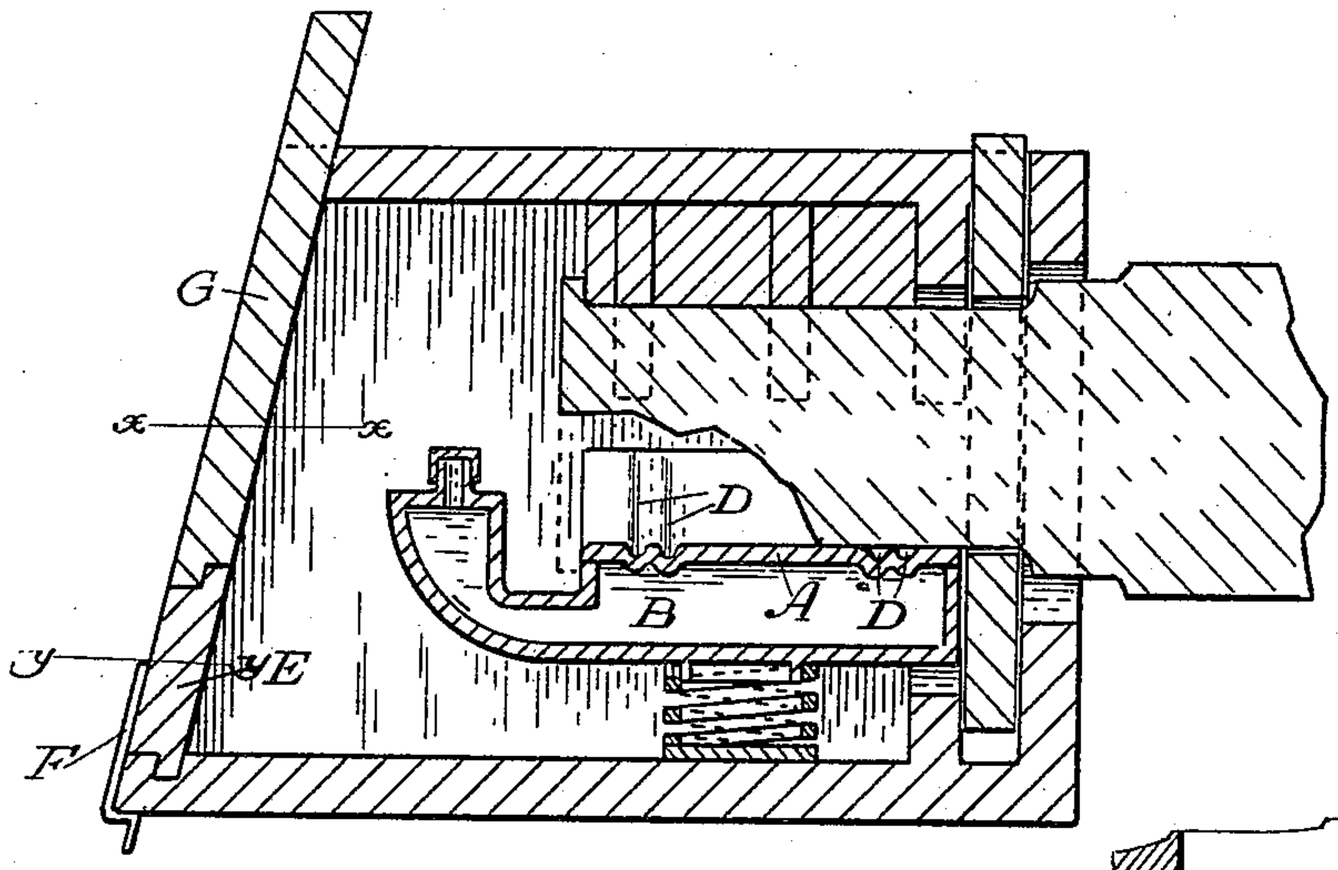

FIG. 1.

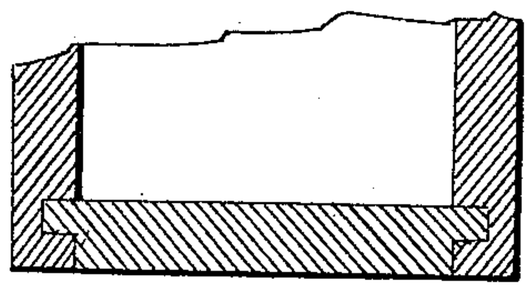

FIG. 4.
on lines x-x and y-y

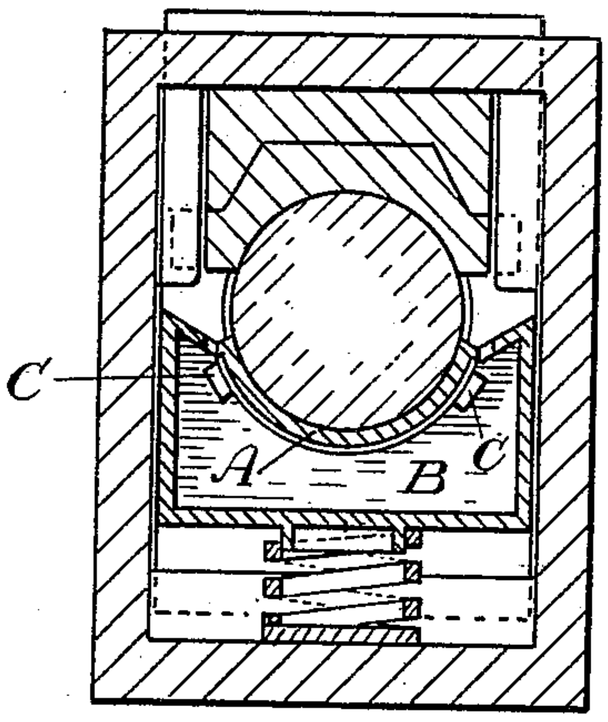

FIG. 2.

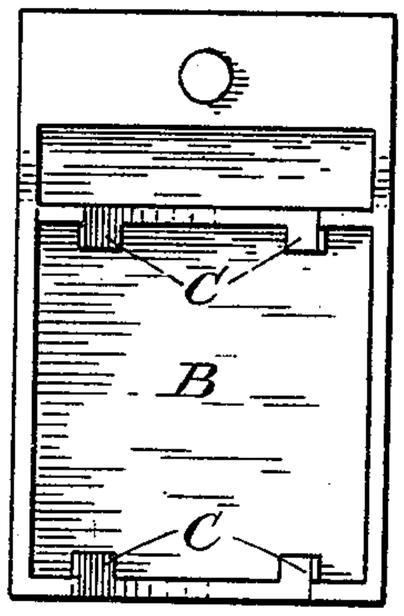

FIG. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWARD BEST, OF CARLETON PLACE, ONTARIO, ASSIGNOR OF TWO-THIRDS TO WILLIAM PRENTER AND JAMES PATRICK KELLEY, BOTH OF OTTAWA, CANADA.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 426,904, dated April 29, 1890.

Application filed February 14, 1890. Serial No. 340,418. (No model.) Patented in Canada December 3, 1889, No. 33,015.

To all whom it may concern:

Be it known that I, EDWARD BEST, of Carleton Place, in the county of Lanark, in the Province of Ontario and Dominion of Canada, have invented certain new and useful Improvements in Car-Axle Boxes, (for which I have obtained a patent in Canada, No. 33,015, bearing date December 3, 1889,) of which the following is a specification.

My invention relates to improvements in the oil-vessel of axle-boxes, and is essentially an improvement on my former invention patented in the United States under number 418,487, and in which a removable oil-vessel having side projections inclined downward toward the concave axle-bearing and provided with openings for the ingress and egress of the lubricant was supported against the under side of the axle by a number of springs.

In the manufacture of the patented oil-vessel above referred to a serious difficulty was encountered in the fact that as said oil-vessel was made entirely in a single piece it was found extremely difficult and expensive to produce.

Another trouble which has been met with in the use of removable lubricators lies in the fact that the construction of the case or car-axle box as at present used necessitates the removal of the axle from the box to allow of the insertion of the oil-vessel.

In view of the above-mentioned objections to the appliances at present in use for lubricating car-axles the objects of my present invention are, first, to facilitate the manufacture of the oil-vessels by making them in two separate pieces, one being a removable top, and, second, to provide for the easy removal or replacing of the oil-vessel without the necessity of removing the axle; which I do by making the entire front or outer end wall of the axle-box removable.

In the accompanying drawings, which illustrate my invention, Figure 1 is a longitudinal sectional elevation of the axle-box with the axle and oil-vessel in place. Fig. 2 is a transvese sectional view of the same. Fig. 3 is a plan view of the oil-vessel without its concave top. Fig. 4 is a horizontal section on the lines $x\,x$ and $y\,y$ of Fig. 1.

The omission of the concave top A makes the casting of the body B of the oil-vessel a plain simple operation that may be easily accomplished by any ordinary molder. The lugs C may either be cast integral with the body B, or they may be made separately and attached to the body by rivets or otherwise. The concave top A being a separate casting from the body B, may be made of a different metal and can be conveniently bored or otherwise dressed to an approved surface. The concave portion is provided with transverse grooves D, which prevent the escape and waste of the lubricant over the ends of the bearing. The top is supported in the body B by the lugs C.

The car-axle boxes now in general use are provided at the front with a fixed ledge extending between the side walls and terminating a short distance above the bottom of the box, the opening above the ledge being closed by a door. This construction while it adapts the box for use as an oil-vessel will prevent the withdrawal or introduction of a removable oil-vessel, when the latter is employed, without removing the axle. To avoid this objection and to adapt the box for use as an oil-vessel, and also to contain a removable oil-vessel, so that it can be withdrawn without taking out the axle, I make the entire front of the box removable, which is done in the present case by combining with a door G a removable ledge E.

As shown in the drawings, the side walls of the box are grooved to receive the ends of the ledge and also the door G, both of which may be removed by sliding them upward from the box. The upper and lower edges of the ledge and the lower edge of the door are formed to produce close joints between the parts when in position. A spring-latch F attached to the ledge engages beneath the box and holds the ledge in position. The door G is held in place by its own weight. Under this construction the box may be used as an oil-vessel, in which case access may be gained to the interior by raising the door G. When, however, a removable oil-vessel is employed, and it is desired to withdraw or introduce it without removing the axle, both the door and ledge are slid upward from between the side walls and the en-

tire front of the box is open, thus affording an unobstructed passage for the oil-vessel.

What I claim as my invention is—

1. The improved car-axle box provided with a horizontal bottom and adapted to receive the end of the axle and a removable oil-vessel, said box having its entire front removable, substantially as described.

2. The car-axle box adapted to receive the end of the axle, in combination with the removable ledge and door.

3. The combination of the axle, the box surrounding its end, the oil-vessel removably seated within the box beneath the end of the axle, the removable door G, the removable ledge E, and the latch for holding the ledge in place.

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

EDWARD BEST.

Witnesses:

J. COURSOLLE,

WM. PRENTER.