

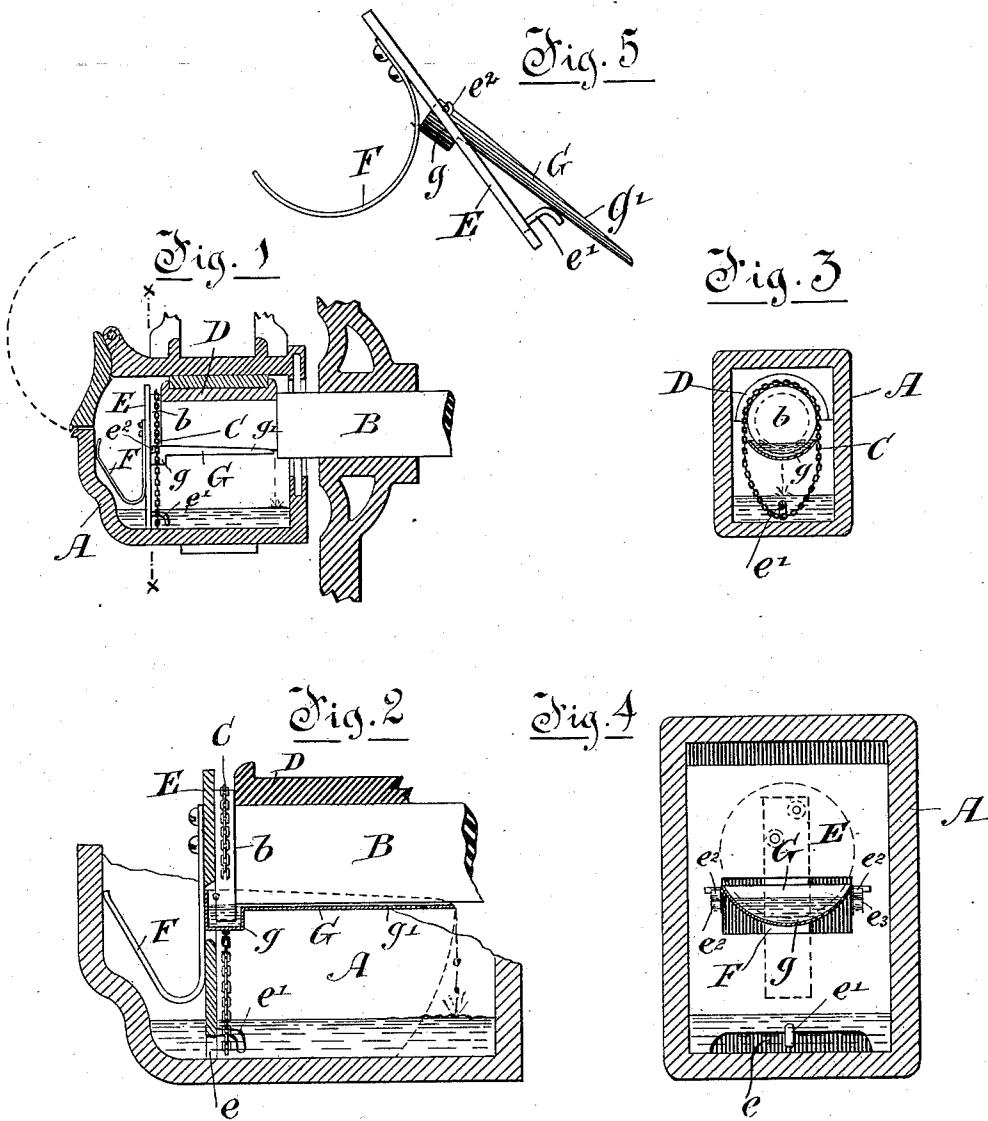
(No Model.)

C. PAGÉ & L. GOULLIQUOD.

CAR AXLE LUBRICATOR.

No. 307,322.

Patented Oct. 28, 1884.



Witnesses:

Owen N. Evans
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Inventors.

Charles Pagé
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UNITED STATES PATENT OFFICE.

CHARLES PAGÉ AND LOUIS GOULLIQUOD, OF MONTREAL, QUEBEC, CANADA,
ASSIGNORS, BY DIRECT AND MESNE ASSIGNMENTS, OF FOUR-SIXTHS TO
JOSEPH DANSEREAU, GEORGE SANDERSON, AND SAMUEL HATT, ALL OF
SAME PLACE, AND GEORGE WASHINGTON FELLOWS, OF NEW YORK, N. Y.

CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 307,322, dated October 28, 1884.

Application filed July 29, 1884. (No model.)

To all whom it may concern:

Be it known that we, CHARLES PAGÉ and LOUIS GOULLIQUOD, both of the city of Montreal, in the District of Montreal and Province of Quebec, Canada, have jointly invented certain new and useful Improvements in Car-Axle Lubricators; and we do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates to an improvement in that class of car-axle lubricators in which a chain is used to elevate the oil from the bottom of the box to the axle; and the improvements consist in combining with any ordinary axle-box having a chain running over the end of the axle contained therein a plate or diaphragm fitting the interior of the box and held up against the end of the axle by means of a spring attached to said plate and bearing also against the front of the box.

Another part of our invention consists in a trough attached at one end to the plate above mentioned, and held up underneath the axle by the same spring which holds said plate in place.

The object of our invention is to provide a cheap and simple lubricating attachment, which can be readily applied to any of the axle-boxes now in use without altering any part thereof, and which will do away with the necessity of using waste, and, further, will effect a great economy in oil and obviate the requirement of frequent replenishment.

For more complete comprehension of the invention reference must be had to the drawings hereto annexed, in which similar letters of reference indicate like parts.

Figure 1 is a sectional view of an axle-box showing our improved lubricator in elevation. Fig. 2 is an enlarged view showing our attachment in section. Fig. 3 is a cross-section of Fig. 1 on line *x x*, looking inward. Fig. 4 is a cross-section of Fig. 2, looking outward. Fig. 5 is a detail view of our attachment removed from the axle-box.

A represents the axle-box, and B the axle, both being of any usual construction and having the ordinary brasses and bearings.

b is the collar or rim at the end of the axle, over which we pass an endless chain, C, depending close to the bottom of the box A. This chain is prevented from slipping off by the brass D on the inside, and by a plate or diaphragm, E, standing vertically in the box A and kept pressed close up against the collar *b* and end of axle by a spring, F, preferably riveted at one end to said plate, bent, and its other end bearing against the inner face of the box, as shown in Figs. 1 and 2. This plate E is of about the same contour as the interior of the box, but has by preference an opening, *e*, at its lower end to permit of the free flow of the oil, which is poured in from the front opening, as at present, a hooked projection, *e'*, being also cast on or fixed to the inner face of the plate, just above the opening *e*, to hold the chain C in place. The plate E has also, about midway between top and bottom, lugs or bearings *e'' e'''* for the pivot-pins of a trough, G, which is of about the shape shown in the drawings—viz., with a shallow well, *g*, at its forward end, in which rests the rim *b* of the axle, and a shallow extension, *g'*, extending inward close underneath the axle, being kept in a horizontal position by the spring F pressing up against the flat forward end, as seen particularly in Fig. 2.

The operation of our lubricator will be easily understood; but we may explain that the oil in the bottom of the box is drawn up onto the collar *b* of the axle by the chain C, is prevented from flying off by the plate E, and drips into the well *g*, and from this passes along the trough, oiling the axle on its passage, and again drips back into the box from the inner end of said trough, as illustrated.

By our invention we waste little or no oil, and without adding more than a trifling expense in first cost we can equip any axle-box with an efficient lubricator which will not be liable to wear out or become detached by the motion of the car.

What we claim is as follows:

1. The combination, with an axle-box and axle, of an endless chain running over said axle, and a plate held against the end of the

axle within the box by means of a spring, substantially as and for the purposes described.

2. The combination, with an axle-box, axle, and endless chain running over said axle near
5 its end, of the plate E, trough G, and spring F, substantially as and for the purpose described.

3. The improved lubricating attachment for
car-axle boxes, consisting of the plate E,
10 trough G, pivoted thereto, and having the well

and shallow extension, and spring F, substantially as specified.

Montreal, July 24, 1884.

CHARL. PAGÉ.

LOUIS GOULLIoud.

Witnesses:

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