(No Model.) 2 Sheets—Sheet 1.

G. COWDERY, T. PERRY & J. B. HYSLOP.

CAR AXLE BOX.

No. 339,269. Patented Apr. 6, 1886.

Fig. 1

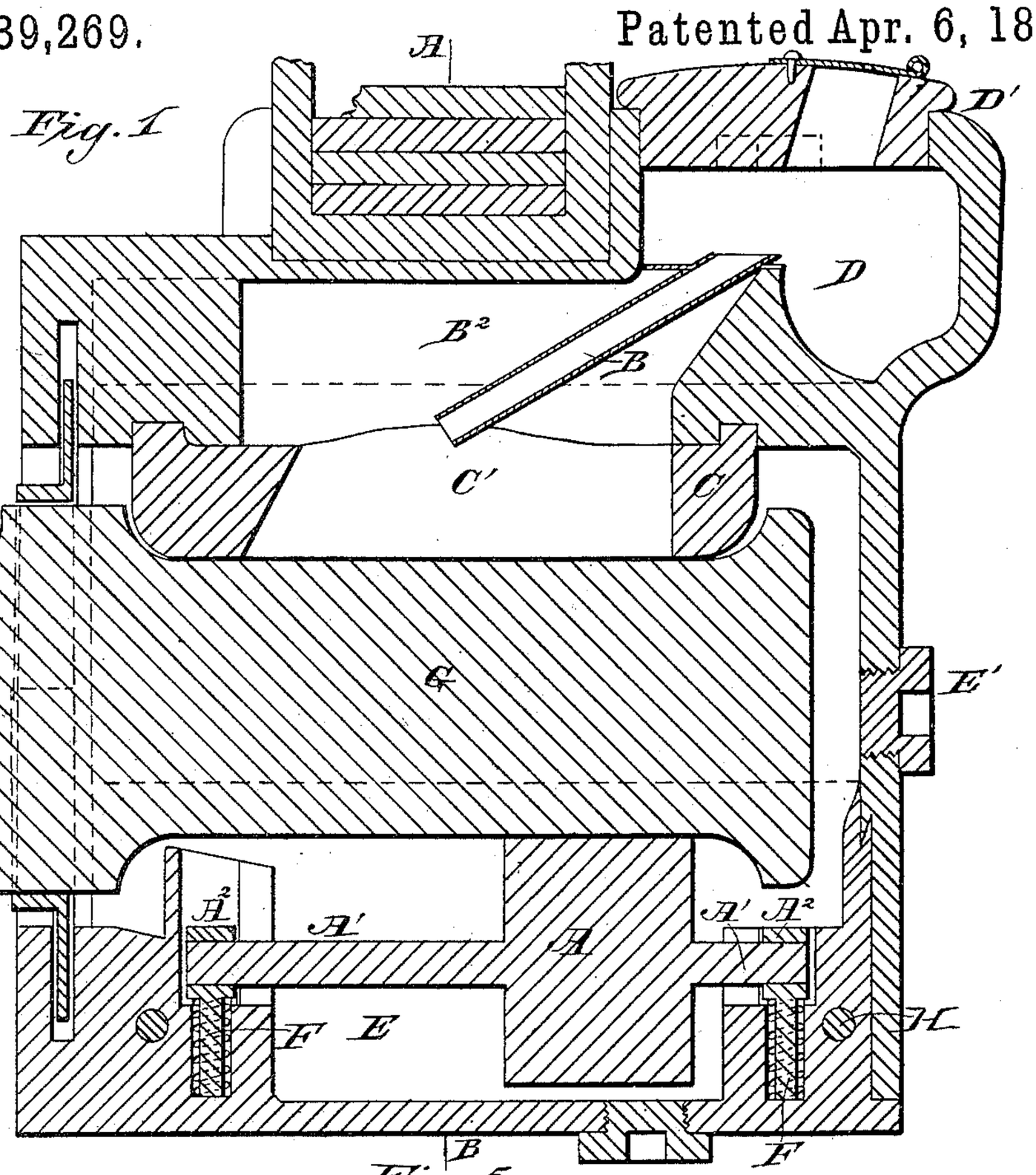
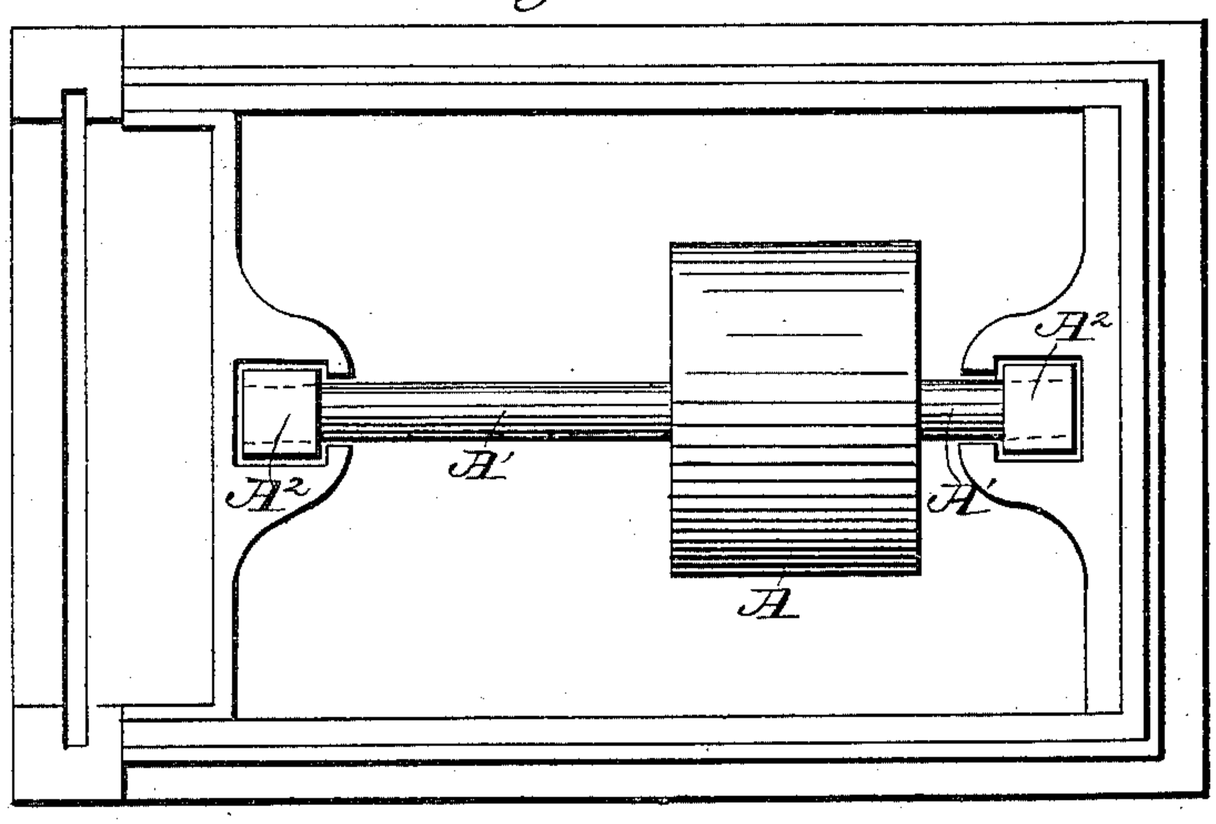


Fig. 5



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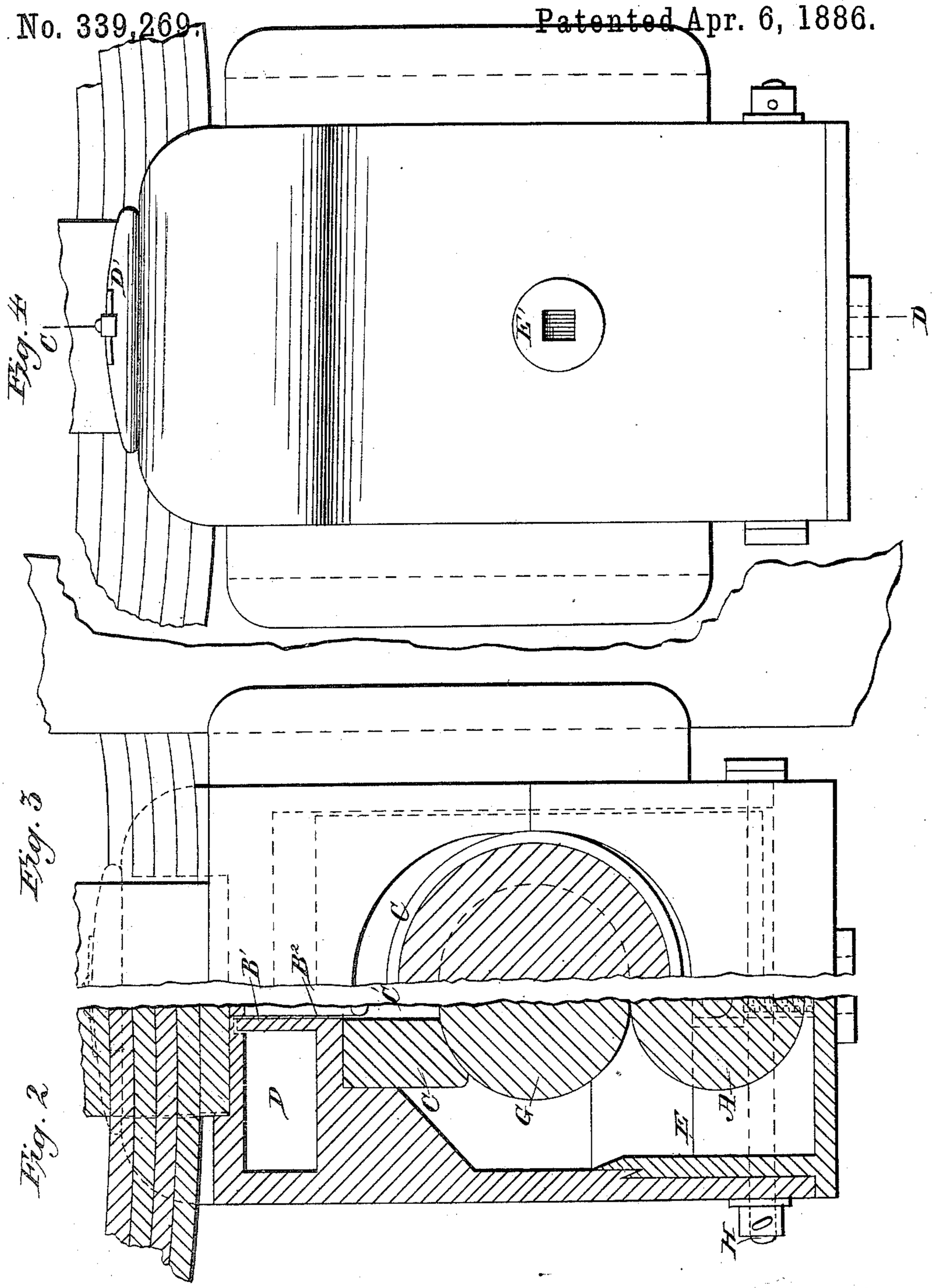

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UNITED STATES PATENT OFFICE.

GEORGE COWDERY, OF BURWOOD, THOMAS PERRY, OF DUBBO, AND JOHN BENTLEY HYSLOP, OF NYNGAN, NEW SOUTH WALES.

CAR-AXLE BOX.

SPECIFICATION forming part of Letters Patent No. 339,269, dated April 6, 1886.

Application filed September 21, 1885. Serial No. 177,754. (No model.) Patented in Victoria July 27, 1885, No. 4,155, and in New South Wales September 10, 1885.

To all whom it may concern:

Be it known that we, GEORGE COWDERY, residing at Burwood, in the British Colony of New South Wales, THOMAS PERRY, residing at Dubbo, in the said Colony, and JOHN BENTLEY HYSLOP, residing at Nyngan, in the said Colony, all subjects of the Queen of Great Britain, have invented certain new and useful Improvements in Lubricators and Boxes for the Axles of Railway and other Rolling-Stock, (for which we have obtained Letters of Registration in New South Wales, dated September 10, 1885, said letters bearing no number,) of which the following is a full, clear, and exact description.

This invention relates to lubricators and boxes for axles of railway and other rolling-stock, and has been specially devised to insure durability in their several parts, ease and economy in renewing such parts, perfectly automatic and continuous lubrication, the exclusion of dirt or dust, and a saving of time and labor in supplying lubricating materials.

Our improvements in lubricators for the axles of railway and other rolling-stock consist of a roller within the oil reservoir or keep elastically pressed against the journal of the axle and revolving with it, and of a siphon feeder leading from an upper oil reservoir or keep and through a slot in the brass or bearing to the journal.

Our improvements in the boxes for the axles of railway and other rolling-stock consist of the combination, with the cap and bottom of such boxes, of horizontal instead of vertical bolts or pins for holding them together, and of the special construction of box, hereinafter more particularly described; but in order that our invention may be clearly understood, reference will now be made to the drawings herewith, in which—

Figure 1 is a central sectional elevation of an axle provided with a lubricator and box constructed according to our invention; and Fig. 2 is a half-section on the line A B in Fig. 1; Fig. 3, a half-back view, and Fig. 4 a front view of the same, while Fig. 5 is a plan of the bottom reservoir or keep.

A is a roller or revolving lubricator; A′, its spindle, and A^2 its bearings. B is a siphon-lubricator; B′, center rib of same, and B^2 slot therein. C is a brass or bearing; C′, slot; D, top reservoir or keep; D′, lid or cover, and D^2 supply-orifice; E, bottom reservoir or keep; E′, supply-orifice; F, spiral springs; G, journal; H, pins or bolts to attach the bottom (having therein the keep E) to the cap holding the brass C.

The roller or lubricator A may be made of any suitable material; but we prefer to make it of hard wood, and it is pressed against the journal G by the springs F. These springs F are preferably of sufficient length to allow the brasses C to be completely worn out and yet press the roller A against the journal G. The roller A is thus set in motion when and only when the axle is revolved, and its motion carries the oil up to and upon the journal G, insuring perfect lubrication. The pipe of the siphon B is supplied with capillary material, preferably worsted threads, by the number of which the quantity of oil or lubricating material passing is regulated. This siphon carries the oil through the slot B^2 in rib B′, and through slot C′ to the journal G. The lid D′ is dropped in place and given a half-turn, to secure its lugs under a flange on the box, and it need only be taken off when a new siphon-lubricator, B, is required, the oil when necessary being poured in through orifice D^2. The pins or bolts H take the place of the four vertical bolts generally used for the purpose of holding the bottom to the top of the "box." To remove the brass C, the pins H are removed, the bottom E dropped downward, the vehicle lifted, and the box slid up the horn-plates, all of which may be done in a few minutes.

Having thus particularly described and ascertained the nature of our said invention, and the manner in which the same is to be performed, what we believe to be novel, and therefore claim as our improvements in lubricators and boxes for the axles of railway and other rolling-stock, is—

1. The herein-described car-axle box, composed of the body of the box provided with a lubricant-reservoir in its upper portion and a bearing for the axle-journal, in combination with a bottom in which is formed a lubricat-

ing-reservoir, said bottom being secured to the body of the box by means of horizontal bolts in contradistinction to the vertical bolts heretofore used, substantially as and for the purpose specified.

2. A car-axle box provided above and below the journal-bearings with lubricant-reservoirs, in combination with a siphon for delivering the lubricant from the upper reservoir to the journal, and a roller for delivering the lubricant from the lower reservoir to said journal, substantially as and for the purpose specified.

3. A car-axle box provided above and below the journal-bearings with oil-reservoirs, a siphon for delivering the lubricant from the upper reservoir to the journal, and a roller for delivering the lubricant from the lower reservoir to said journal, in combination with the brasses C, provided with an enlarged slot, C′, into which the siphon dips, substantially as and for the purpose specified.

4. A car-axle box having lubricant reservoirs above and below the journal-bearings and feed-openings on top and in front of the box, respectively, leading to said reservoirs, and longitudinally-slotted brasses C, in combination with a roller supported from spring-bearings for delivering the oil from the lower reservoir directly to the axle-journal, and a siphon for delivering the lubricant from the upper reservoir to said journal through the slotted brasses, substantially as and for the purpose specified.

GEORGE COWDERY.

Witnesses:
FRED. WALSH,
JOHN HYNON.

THOMAS PERRY.

Witnesses:
GEORGE H. TAYLOR, *J. P.*,
GEO. MACFARLANE.

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