(No Model.)

T. WHITE.
Axle Lubricator.

No. 235,717. Patented Dec. 21, 1880.

Fig. 1.

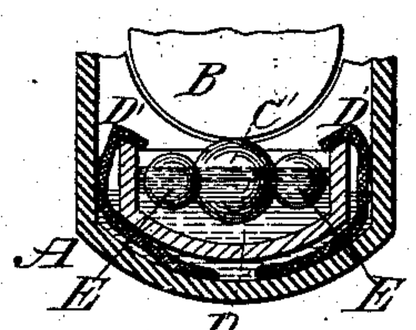


Fig. 2.

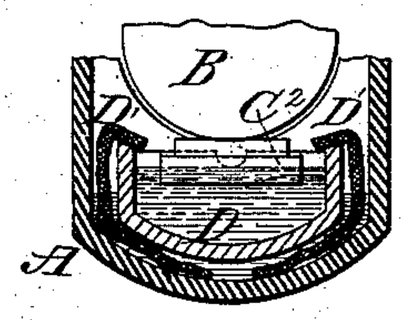


Fig. 3.

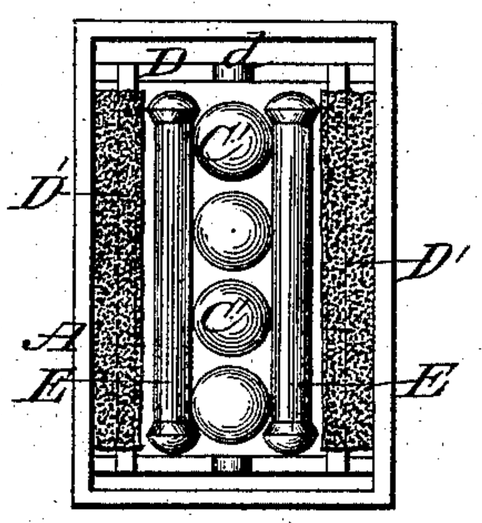
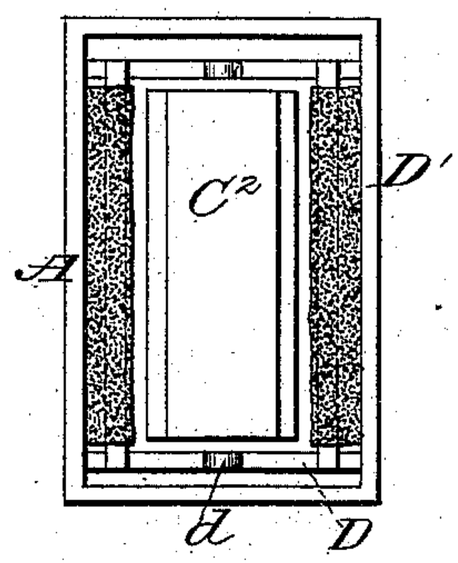


Fig. 4.



Witnesses:
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UNITED STATES PATENT OFFICE.

TIMOTHY WHITE, OF LANDPORT, PORTSMOUTH, COUNTY OF HANTS, ENGLAND.

AXLE-LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 235,717, dated December 21, 1880.

Application filed May 21, 1880. (No model.) Patented in England April 17, 1878.

To all whom it may concern:

Be it known that I, TIMOTHY WHITE, of Landport, Portsmouth, in the county of Hants, England, oil-merchant, have invented a new and useful improvement in means or apparatus for lubricating the axles and bearings of railway-engines, carriages, and wagons, and bearings of machinery generally, and other constructions requiring lubrication, (for which I have obtained a patent in Great Britain for fourteen years, No. 1,530, dated April 17, 1878,) of which the following is a specification, reference being had to the accompanying drawings, and to the figures and letters marked thereon—that is to say:

This invention relates to means of, or apparatus for, effecting that class of lubrication known as "under lubrication," and is applicable to railway-cars and other machinery.

The invention consists of the new combination of parts hereinafter specifically pointed out.

In the drawings attached hereto, Figure 1 represents a sectional view of my improved lubricating apparatus. Fig. 2 is a sectional view of a modification of the same. Figs. 3 and 4 are plan views of Figs. 1 and 2, respectively.

A represents the under box or bearing; B, the axle, shaft, or trunnions to be lubricated.

C C′ are floats, the surfaces whereof will, by their buoyancy, maintain a surface-contact with the shaft B, said floats being either cylinders with rounded ends or spheres or the two in combination.

D are frames, which are to be placed in the oil-box A, and are designed for purpose of adapting this invention to the various under boxes at present in use on different railways, and they will act to adjust the floats to keep the same in central position for giving off the oil to the shaft or trunnion to be lubricated on its rotation.

The frames D are formed as receptacles. Therefore I have provided an arrangement of web or wick, D′, which is arranged with one end or side thereof dipping into the float-frame D, and the other end whereof dips into the oil-reservoir or under box, A, and by capillary attraction the said float-frame will be kept replenished with oil for the floats C C′.

At *d*, Figs. 3 and 4, in the float-adjusting frame D, is a channel of sufficient depth to insure that the proper level of the oil shall not be exceeded.

The float C^2 (shown in Figs. 2 and 4) is a flat floating pad, of suitable material, such as cork, or of hollow structure, and with its contact-surface or upper side covered with fibrous or textile material, for purpose of applying the oil to the under side of shaft B to be lubricated, and which shaft rotates in contact therewith.

E are secondary adjusting-floats for the main or lubricating floats C C′, and are for purpose of keeping the floats C C′ centrally arranged in position relative to the axle to be lubricated—that is, in line therewith. The floats E are furnished with projecting parts at the ends thereof, as shown in Figs. 1 and 3. The projecting parts of the adjusting-floats E and the rounded ends of the cylindrical floats and rounded surfaces of the spheres are for the purpose of reducing or preventing the attraction of cohesion of the floats to the frames or adjusters D or E, whereby is afforded increased facility for the rotation of the floats within the lubricant, and any danger of obstruction to the floats' rotation is avoided.

I claim—

The combination of the box-frame D, having channel *d*, with the lubricating float or floats, supply-wicks D′, and with the box A, substantially as and for the purpose herein described and shown.

In testimony whereof I have hereunto set my hand this 15th day of April, 1880.

TIMOTHY WHITE.

Witnesses:

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