T. MANNERS.

AXLE BOX LUBRICATOR.

APPLICATION FILED OCT. 8, 1908.

974,407. **Patented Nov. 1, 1910.**

Fig. 1.

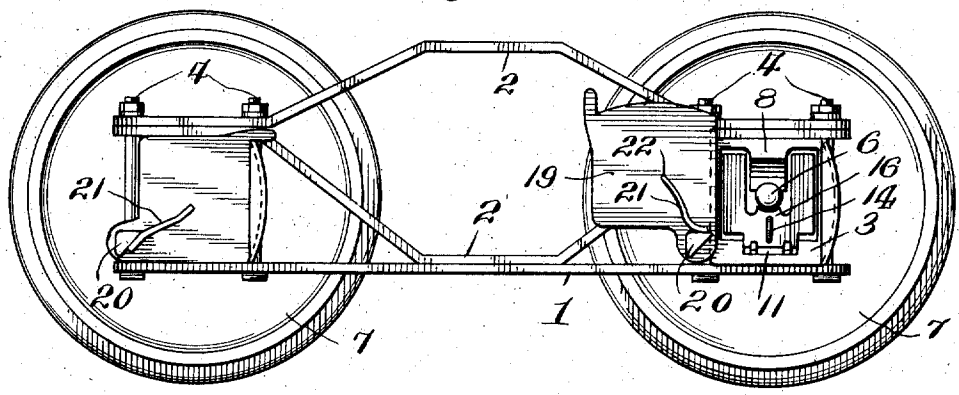


Fig. 2.

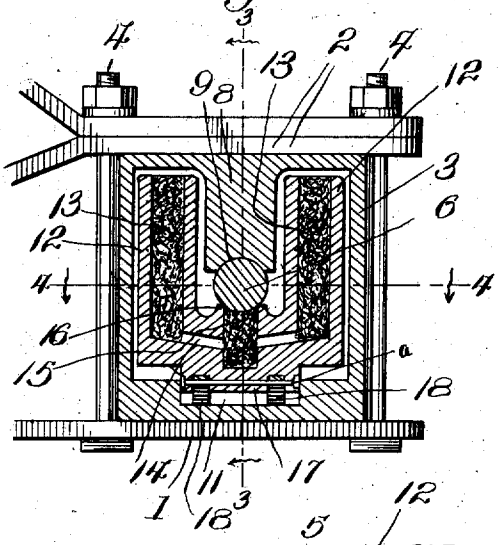
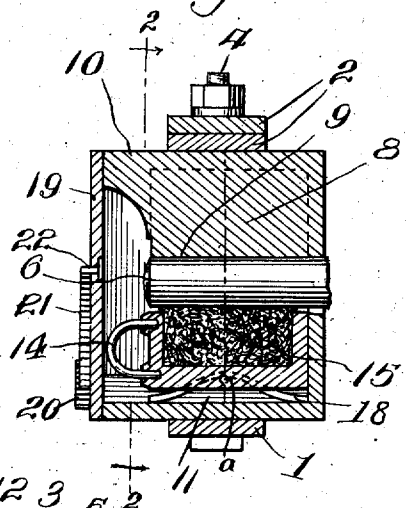


Fig. 3.



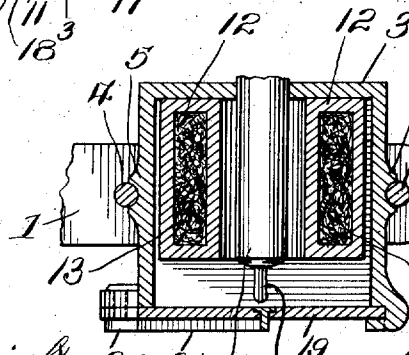


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

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AXLE-BOX LUBRICATOR.

974,407. Specification of Letters Patent. Patented Nov. 1, 1910.

Application filed October 9, 1908. Serial No. 456,934.

To all whom it may concern:

Be it known that I, THOMAS MANNERS, a citizen of the United States of America, residing at Rice, in the county of Navarro and State of Texas, have invented new and useful Improvements in Axle-Box Lubricators, of which the following is a specification.

This invention relates to axle box lubricators for railway cars, and one of the principal objects of the same is to provide simple and efficient means for applying oil to the axles of railway trucks which will prevent splashing of the oil and which will result in saving the lubricant and the waste material or absorbent wicking used for feeding the oil to the axle.

Another object of the invention is to provide a lubricator which can be quickly withdrawn from the axle box for filling with the lubricant and readily replaced and held in position.

These and other objects may be attained by means of the construction illustrated in the accompanying drawing, in which—

Figure 1 is a side elevation of a car truck provided with my improved lubricating device. Fig. 2 is a vertical sectional view on the line 2—2 of Fig. 3, looking in the direction indicated by the arrows. Fig. 3 is a vertical section on the line 3—3 of Fig. 2, looking in the direction indicated by the arrows. Fig. 4 is a horizontal section on the line 4—4 of Fig. 2, looking in the direction indicated by the arrows.

Referring to Fig. 1 of the drawing, the numeral 1 designates the base bar or bolster, and 2 are the truss bars of an ordinary car truck. Supported between the opposite ends of the trusses and bolster are the axle boxes 3 which are secured in place by means of the bolts 4 which engage curved bosses 5 at the opposite sides of the box. The wheel axles 6 extend into the boxes, and the wheels 7 are properly mounted upon said axles. Since these boxes and lubricators are of identical construction at the opposite ends of the truck, a description of one will suffice as a description for both. The axle box 3 is provided with a centrally depending bearing member 8 which is provided with a curved under surface 9 for the axle 6. The member 8 has a forwardly projecting stop lug 10 against which the door of the box bears when closed. A recess 11 is formed centrally in the floor of the box.

Mounted to slide within the box is my lubricating device comprising a casing consisting of the two vertically disposed spaced feed members 12 adapted to be filled with waste or other absorbent material 13, said members being connected by a transverse oil passage or duct 14. Provided in the center of the lubricator is a recess in which is placed an absorbent material, like waste or wicking 15, which intersects the oil duct 14. The axle 6 bears upon the upper side of the absorbent material 15 and rests in a curved seat 16. On the underside of the lubricator a centrally projecting portion 17 is provided with bearing springs 18 held in place by a pin *a*, said springs being curved and resting at their lower ends upon the floor of the box within the recess 11. Secured to the front portion of the lubricator is a suitable loop or handle 14 for withdrawing the lubricator.

The door 19 of the box is pivotally mounted upon a pintle at one of the lower corners of the box, said pintle being provided with an angular head 20. A spring 21 is secured to the door at 22, the free end of said spring bearing against the angular head 20 and serving to hold said door in either its open or closed position.

The operation of my invention may be briefly described as follows:—Whenever it is desired to replenish the oil in the lubricator the door 19 is swung upon its pintle to the position shown at the right of Fig. 1, and by grasping the handle 14 the lubricator is withdrawn from the box. After the lubricator has been filled it is pushed back into the axle box and the door is closed.

From the foregoing, it will be obvious that a lubricator made in accordance with my invention is comparatively simple in construction, will keep an axle lubricated without wasting oil or destroying the absorbent material, can be quickly replenished with lubricant and can be quickly connected to any car truck.

I claim:—

An axle lubricator comprising an axle box open at its outer end and having a medially disposed depending member, the lower end of which is provided with a concaved surface forming a bearing for the upper surface of the axle, a U-shaped lubricator removably fitted in the axle box and provided on its lower side with bow-shaped springs serving to support the lubricator in spaced relation to the lower side of the box,

said lubricator having its opposite limbs arranged adjacent to the opposite sides of the depending member and the portion connecting said limbs located below the axle and provided on its upper side with a concavity forming a bearing surface for the lower side of the axle, the said limbs being hollow and forming recesses filled with waste and the said portion connecting the said limbs being medially provided with a waste filled recess communicating with the second-named concavity, and further provided with downwardly inclined oil passages connecting the recesses of the limbs with the recess of the portion connecting the limbs, and a U-shaped handle located at the medial portion of the outer end of the lubricator and extending to a point adjacent to the open end of the box and providing a grip for removing the lubricator.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS MANNERS.

Witnesses:

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