

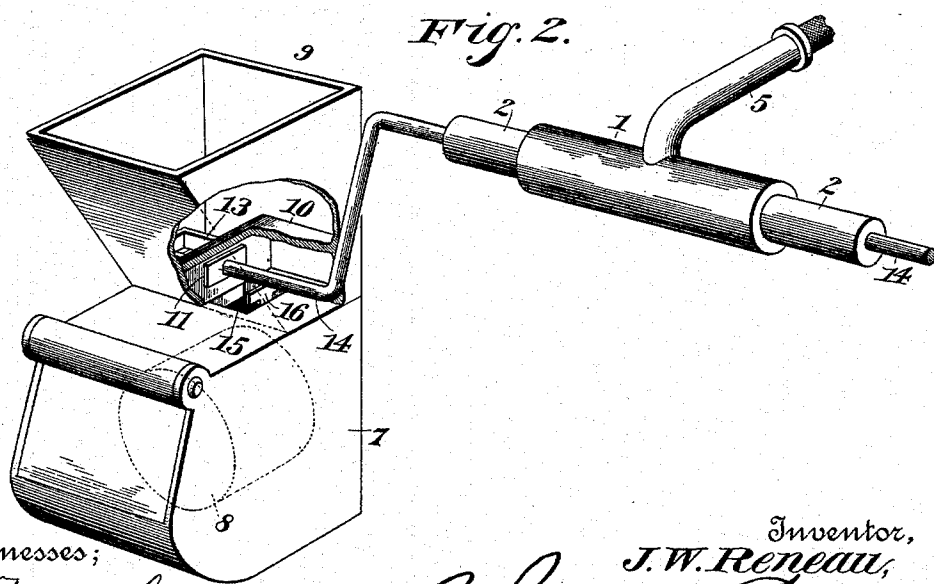
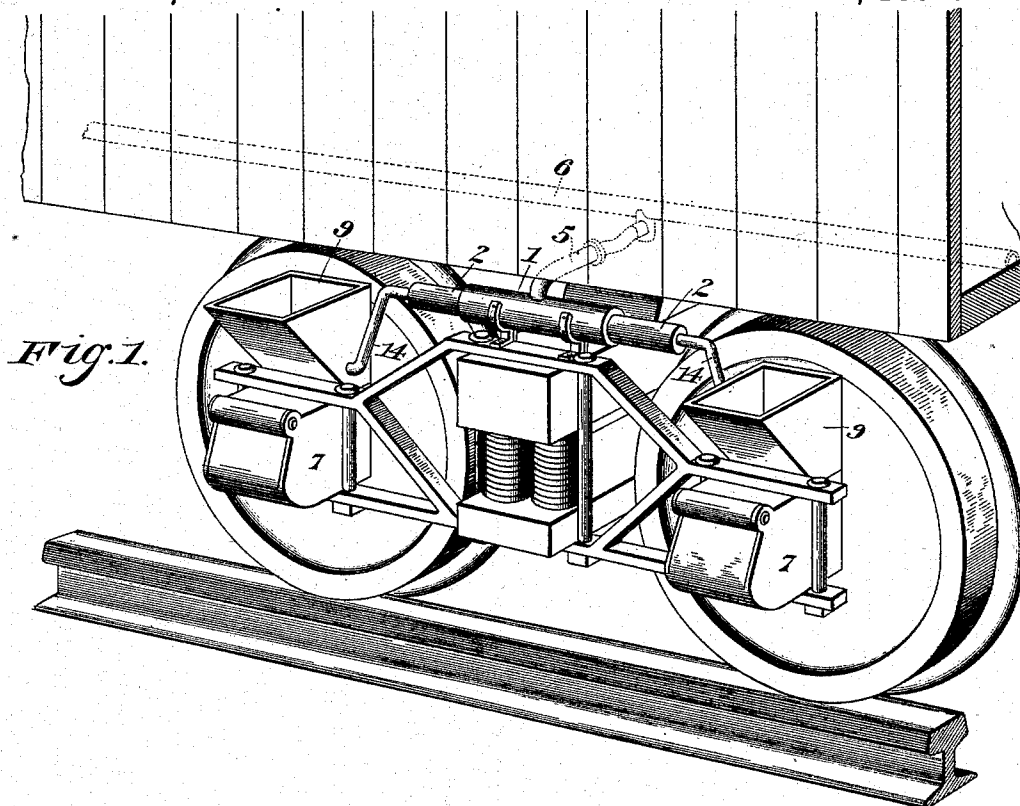
(No Model.)

2 Sheets—Sheet 1.

J. W. RENEAU.
CAR WHEEL LUBRICATOR.

No. 527,447.

Patented Oct. 16, 1894.



Witnesses;

J. M. Withersow.
E. G. Myers

Inventor,

J. W. Renau,

By Joseph H. Atkins
Attorney

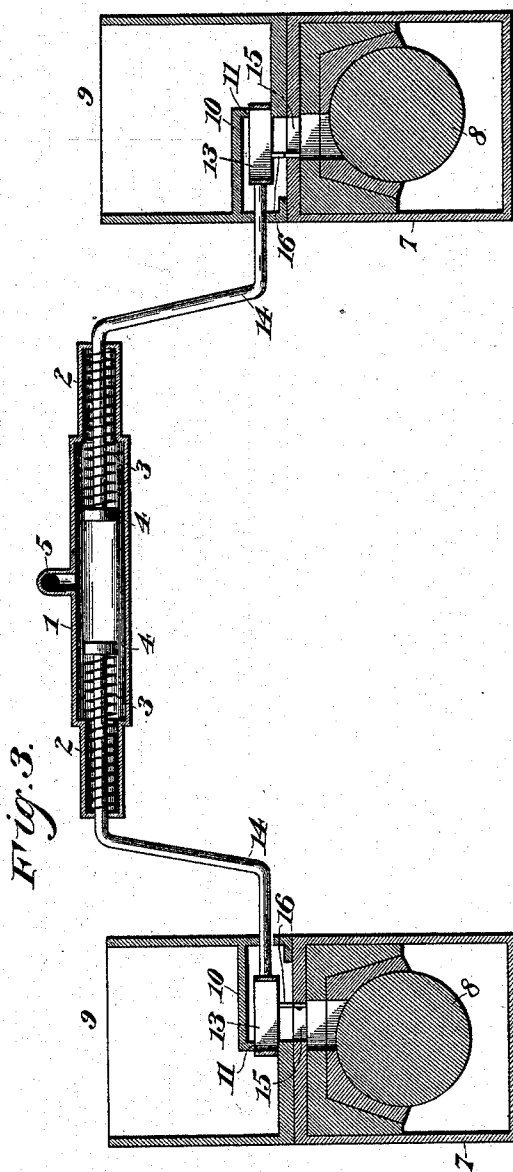
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UNITED STATES PATENT OFFICE.

JAMES W. RENEAU, OF HOUSTON, TEXAS.

CAR-WHEEL LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 527,447, dated October 16, 1894.

Application filed December 19, 1893. Serial No. 494,018. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. RENEAU, of Houston, county of Harris, State of Texas, have invented certain new and useful Improvements in Car-Wheel Lubricators, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce an improved lubricator for car wheels, one which can be readily operated while the wheels are in motion, or at other times, and which, feeding only when it is desired, avoids leakage.

In the accompanying drawings, Figure 1 is a perspective view of two car wheels with my device attached. Fig. 2 illustrates in perspective one of the lubricating boxes and axle boxes with parts of the walls broken away. Fig. 3 is a central vertical section thereof through the feed box and contiguous parts.

Referring to the figures on the drawings: 1 indicates an air tight cylinder having, preferably at opposite ends, reduced parts 2 to accommodate springs 3. The springs are seated in the ends of the reduced parts at one end and at the other bear against the piston heads 4, respectively. The springs tend normally to urge the piston heads toward each other. For driving them in the opposite direction, I employ a power of compressed air communicated, as through a pipe 5, to the pistons. When the air is forced into the cylinders the pistons are urged outwardly. When it is exhausted, the springs force them in the opposite direction.

For controlling the pneumatic pressure in the cylinder 1, I employ any suitable mechanism communicating with the cylinder through the pipe 5, as for example, an air brake pipe 6. I do not, however, limit myself to the employment of this particular means, because a special pipe may be employed, or any suitable mechanism may be substituted therefor.

7 indicates an axle box and 8 the axle. 9 indicates a lubricator box or reservoir designed to contain a suitable lubricant.

10 indicates an interior wall in the lubricator box through which a feed outlet opening 11 is made and within which opening is preferably closely fitted a feed box 13 carried upon the end of the piston rod 14, which may be bent to bring it in suitable relations with the pistons. By the reciprocation of the piston the feed box is caused to move back and forth through the opening 11 into and out of

the lubricator box 9. With each outward reciprocation, the feed box carries a certain quantity of lubricant which it deposits upon the axle 8, as through an opening 15, constituting thereby mechanism adapted to regulate the feed of the lubricant.

A scraper 16 carried in proximity to the feed box 13 is preferably employed so that the box is thoroughly cleared after each feeding operation.

I do not confine myself to the details of construction herein shown and described, but reserve the right to modify and vary the same at will within the scope of my invention.

What I claim is—

1. In a lubricator, the combination, with a reservoir and a reciprocatory feed box, of a pneumatic cylinder, means for conveying pneumatic energy thereto, a piston and piston actuating spring within the cylinder, and mechanism operatively connecting the piston with the feed box, substantially as specified.

2. In a car axle lubricator, the combination, with a car, of a reservoir, movable feed box, pneumatic pressure supply pipe, cylinder, pipe connecting the interior of the cylinder with the supply pipe, a piston within the cylinder, and mechanism connecting the piston with the feed box, substantially as specified.

3. In a lubricating apparatus, the combination, with a pneumatic cylinder and means for supplying the same with pneumatic energy, of a plurality of lubricating reservoirs and feed boxes, a plurality of pistons within the cylinder and mechanism operatively connecting the feed boxes and pistons, respectively, substantially as specified.

4. In a lubricating apparatus, the combination with a pneumatic cylinder, of a plurality of pistons therein, a plurality of reservoirs and feed boxes, mechanism operatively connecting the feed boxes and pistons, respectively, means for supplying the cylinder with pneumatic energy between the pistons to actuate them simultaneously in one direction, and automatically actuating mechanism adapted to actuate the pistons in the opposite direction, substantially as specified.

In testimony of all which I have hereunto subscribed my name.

JAMES W. RENEAU.

Witnesses:

F. C. RENEAU,
C. H. ALLEN.