CARRIE R. LAMAN.

Improvement in Lubricating Railway-Journals.

No. 114,157. Patented April 25, 1871.

Fig. 1.

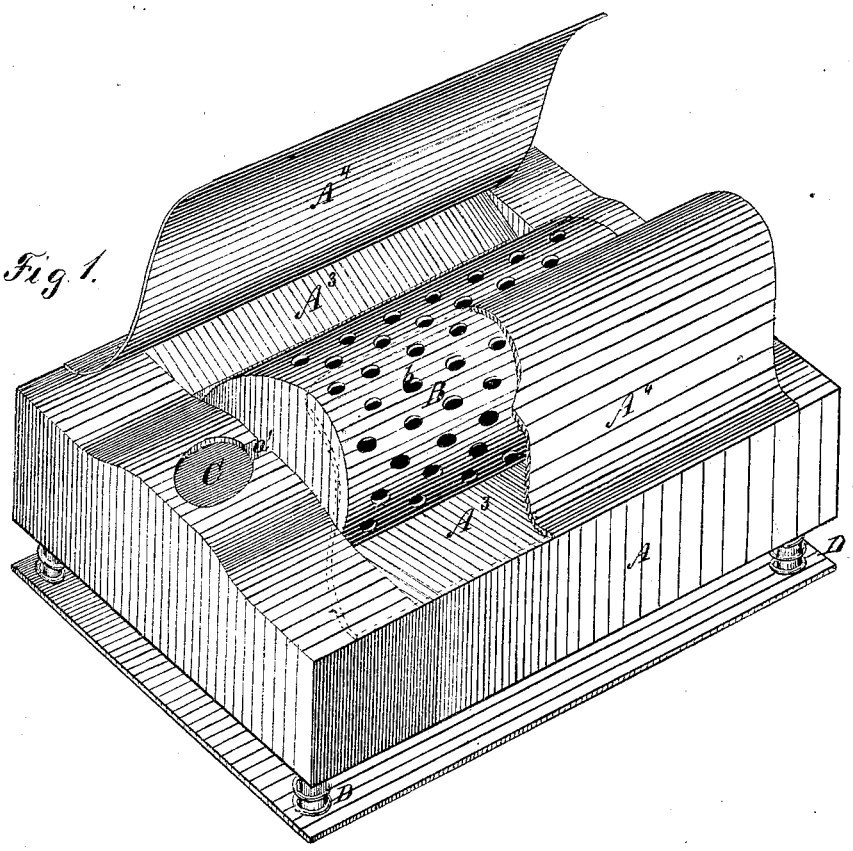


Fig. 2.

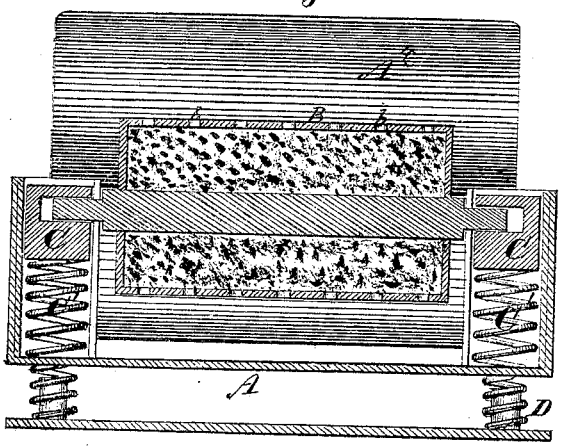
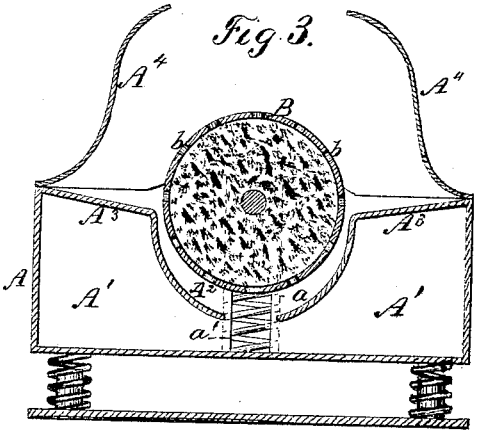


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

CARRIE R. LAMAN, OF PAINTED POST, NEW YORK.

IMPROVEMENT IN LUBRICATING RAILWAY-JOURNALS.

Specification forming part of Letters Patent No. **114,157**, dated April 25, 1871.

To all whom it may concern:

Be it known that I, CARRIE R. LAMAN, of Painted Post, in the county of Steuben and State of New York, have invented a new and useful Improvement in Lubricators; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, making part of this specification.

Corresponding letters refer to corresponding parts.

Figure I represents a perspective view of my improved lubricating device. Fig. II is a vertical longitudinal section. Fig. III is a transverse section.

This invention relates to that class of devices for lubricating the journals of car-axles, and other rotating journals having their bearing-surface on the upper side, in which a roller is employed, partially immersed in oil, which, in rotating by frictional contact with the under surface of the journal, lubricates the latter continually while in motion.

My improvement consists in the construction of the oiling-roller, which is composed of a tube with closed ends and a perforated shell, in which some oil-absorbing material, such as sponge, wool, cotton-waste, &c., is packed.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The oil box or reservoir A should be made of such external form and dimensions as to fit the journal-box to which it is to be applied.

The box consists, essentially, of an oil-chamber, A^1, surrounding a cavity, A^2, for the reception of the oiling-roller B, into which cavity the oil flows through a longitudinal slot, *a*, in its bottom to immerse the lower part of the roller.

The plates A^3 are made slightly inclined from the edges of the box to the edges of its cavity A^2, so that any oil slopped over upon them will flow back into said cavity.

The sides and ends of the latter are in very close proximity to the surfaces of the oiling-roller, so as to permit of only a very thin sheet of oil being carried up by it in its rotations; but the segmental bottom should be a suitable distance below the roller, so as to allow of the vertical movements of the latter consequent upon the joltings of the car.

To still further guard against the possible waste of oil, I form a ring, A^4, upon the top of the box, along each side of the oiling-roller, extending up to near the journal to be lubricated, which will catch any drops of oil thrown off by roller or journal and return them into the box.

An open chamber is formed in each end of the oil-box, for the reception of the bearings C and spiral springs C′, upon which they rest.

Vertical slots *a*′ in the end plates of the cavity A^2 connect the latter with these chambers and form guides for the journals of the oiling-roller, which are supported in these spring-bearings.

The oiling-roller is composed of a cylindrical shell of any suitable material, in which some absorbing substance, such as sponge, wool, cotton-waste, is packed in such a state of compactness that it will readily absorb the oil.

The shell is provided with small holes *b* at suitably short intervals, tightly closed at the ends, and mounted upon a shaft, the journals of which rest in the spring-bearings C C′, by which the roller is kept in frictional contact with the under side of the journal to be lubricated.

As the roller is rotated by the journal it will oil the latter with the oil on its surface, as well as that supplied through its perforations by the absorbing material in it; and the lubricating will continue even after the lower surface of the roller is above the oil in the box, by the oil contained in the absorbent, and exuded through the perforations by centrifugal force.

The box A is supported upon four springs, D, one at each corner, to aid in keeping the roller in contact with the journal.

What I claim, and desire to secure by Letters Patent, is—

The oiling-roller B, composed of a perforated cylinder packed with sponge or other absorbent material, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CARRIE R. LAMAN.

Witnesses:

LUCENA CALKINS,

H. D. EDWARDS.