C. D. FLYNT.

CAR-AXLE LUBRICATOR.

No. 172,408. Patented Jan. 18, 1876.

Fig. 1.

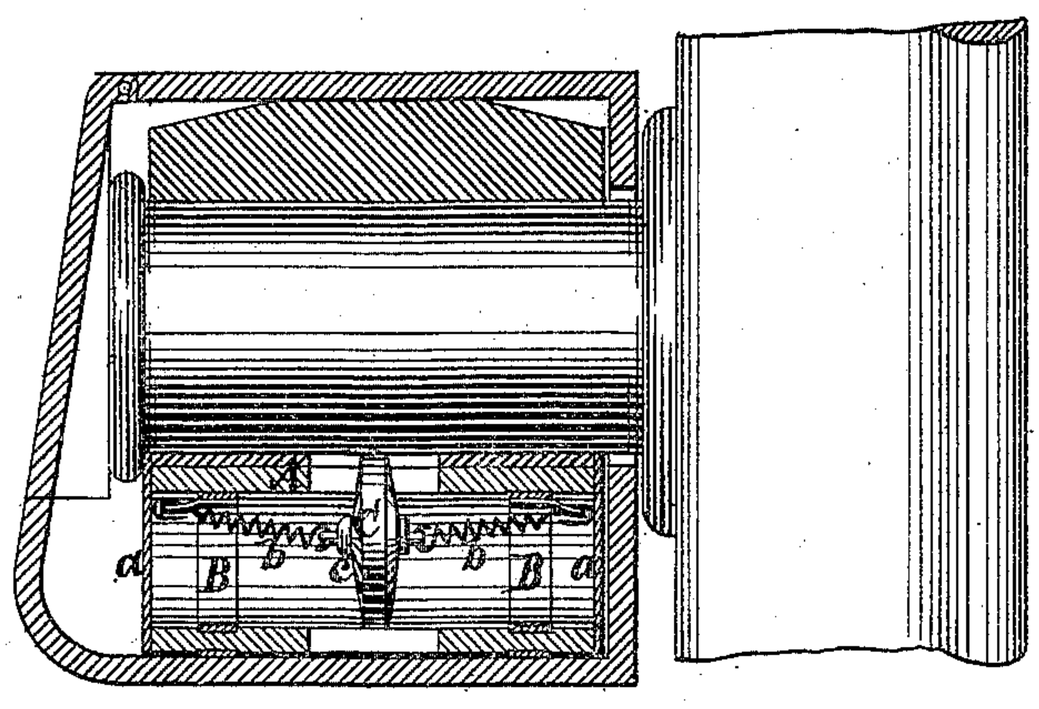
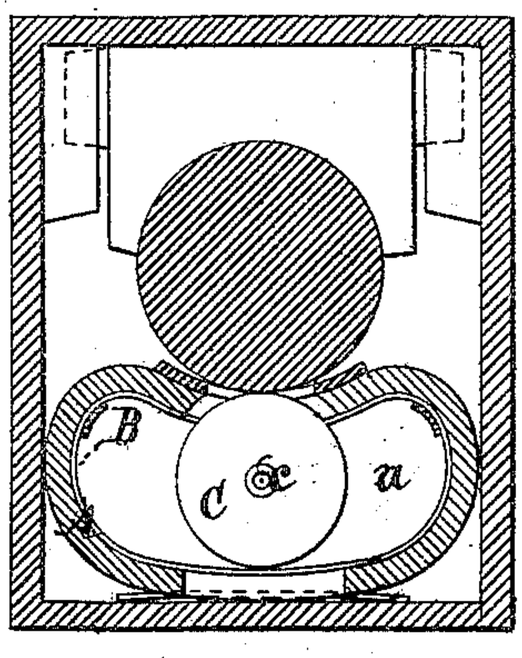


Fig. 2.



Witnesses.

Otto Schufeldt

Chas. Wahlers.

Inventor.

Chester D. Flynt

per

Van Santvoord & Hauff.

Attys.

UNITED STATES PATENT OFFICE.

CHESTER D. FLYNT, OF BROOKLYN, NEW YORK, ASSIGNOR TO HIMSELF, ISRAEL E. SAYRE, AND WILLIAM R. TICE, OF SAME PLACE.

IMPROVEMENT IN CAR-AXLE LUBRICATORS.

Specification forming part of Letters Patent No. **172,408**, dated January 18, 1876; application filed November 22, 1875.

To all whom it may concern:

Be it known that I, CHESTER D. FLYNT, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Car-Axle Lubricators, which improvement is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a longitudinal vertical section. Fig. 2 is a transverse vertical section.

Similar letters indicate corresponding parts.

This invention consists in an elliptical absorbent pad, held in position by a frame of spring-steel or other suitable material, and provided with aprons at its ends, so that when said elliptical pad is placed in an axle-box the aprons are closed, and while the journal is constantly supplied with oil the entrance of dust or dirt to the interior of the elliptical pad is prevented, and the oil supplied to the bearing is kept clean. With the absorbent pad is combined a wheel, running loosely on a gudgeon, supported by spiral springs, which extend in the direction of said gudgeon, so that said wheel is free to accommodate itself to the journal of the axle, and that by its action, combined with that of the absorbent pad, the journal is constantly kept lubricated.

In the drawing, the letter A designates an elliptical absorbent pad, which is supported by an elastic frame, B, made of spring-steel or any other suitable material, and which is made of such a size that, when the same is placed in the bottom of a car-axle box, its upper surface will be held tight against the bearing of the axle by the action of the elastic frame B. On the ends of the elliptical pad A are secured aprons *a*, of leather or other suitable material; and when said pad is compressed into an axle-box these aprons close up tight against its ends, and the entrance of dust to the interior of the pad is effectually prevented.

The oil or lubricating material supplied to the bearing is thus kept clean, and the danger that the bearing will heat is materially reduced.

With the absorbent pad A is combined a wheel, C, which rotates loosely on a gudgeon, *c*, which is suspended between two spiral springs, *b b*, extending from its ends, and secured to the pad-supporting frame B.

The wheel C may be made of metal, wood, cork, leather, or any other suitable material or combination of materials; and the gudgeon *c*, instead of being made separate from the springs, may be made in one piece with said springs; or, in other words, one spring may be used, which extends through the wheel and forms the bearing for the same.

By means of the spring or springs *b b* the wheel C is held in contact with the journal of the axle; and when the axle revolves, the wheel is caused to revolve by frictional contact; and, as the same dips into the lubricating material in the lower part of the axle-box, the journal of the axle is kept supplied with such lubricating material as long as it is in motion. At the same time the spring or springs *b b* allow the wheel to accommodate itself at all times to the position of the journal.

The spiral springs *b b* and the gudgeon *c* can be readily applied; they are not liable to get out of order; and they can be adapted to wheels of any shape or material.

I do not claim, broadly, as my invention a lubricating-wheel which revolves in contact with the journal of a car-axle. Neither do I claim a lubricating-wheel attached to elastic arms, such being shown in my Patent No. 166,600, dated August 10, 1875.

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

1. The combination, in a car-axle box and the journal, of an elliptical pad, A, of absorbent material, supported upon elliptical springs secured within the same, said pad having aprons at its ends, for closing the same, the whole forming a chamber for the lubricating-roller, provided with openings at the bottom and top, for the admission of the lubricant

and distribution of the same, substantially as described.

2. In a car-axle lubricator, the combination, with the elliptical pad, closed at its ends, of a wheel or roller, running on spiral springs or gudgeons, supported thereby, the said springs being supported by the distending-springs, and located entirely within the chamber of the pad, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 17th day of November, 1875.

C. D. FLYNT. [L. S.]

Witnesses:
W. HAUFF,
E. F. KASTENHUBER.