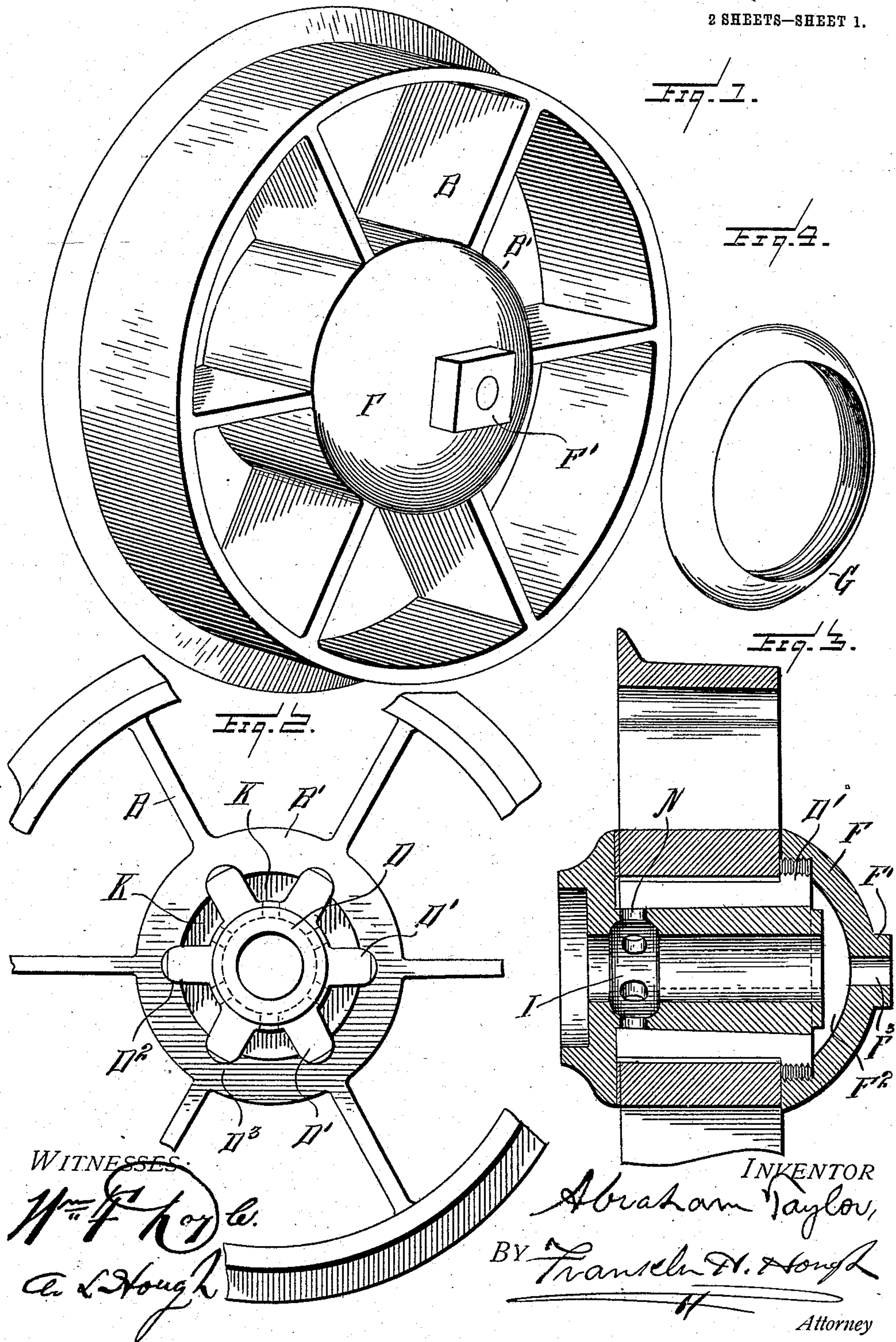


A. TAYLOR.
LUBRICATOR FOR CAR WHEELS.
APPLICATION FILED FEB. 7, 1908.

908,047.

Patented Dec. 29, 1908.

2 SHEETS—SHEET 1.

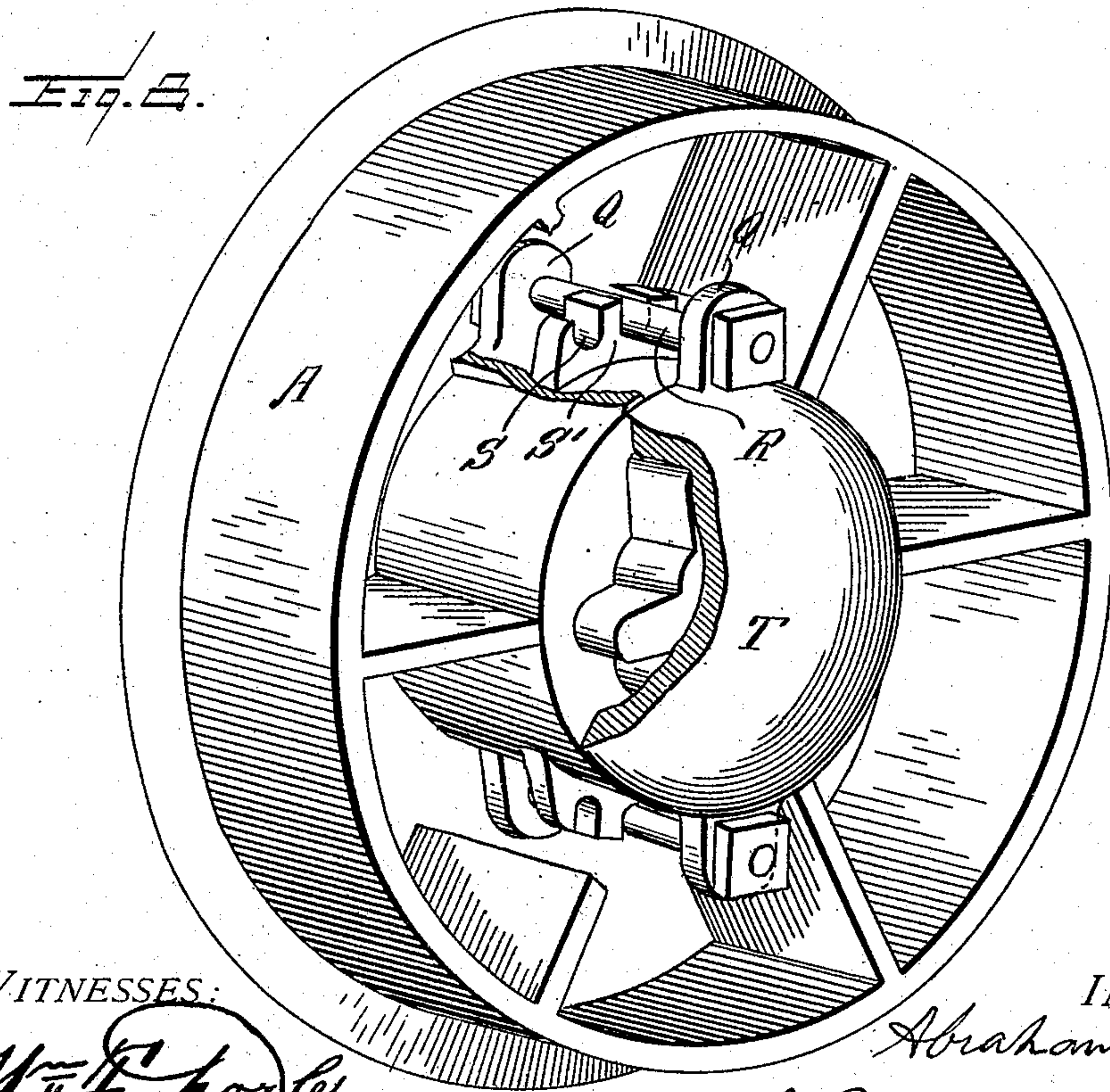
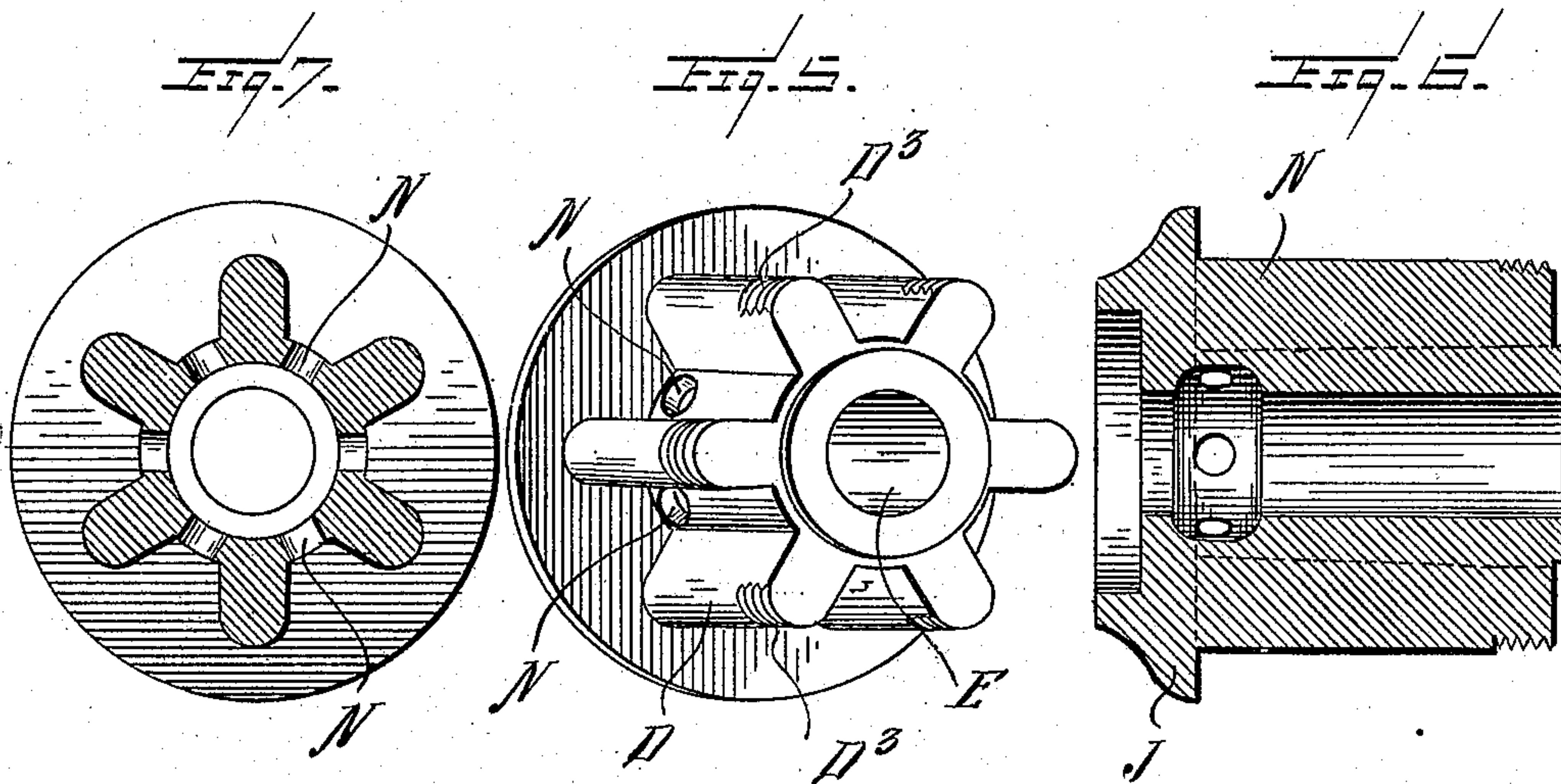


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WITNESSES:

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UNITED STATES PATENT OFFICE.

ABRAHAM TAYLOR, OF CRESSON, PENNSYLVANIA.

LUBRICATOR FOR CAR-WHEELS.

No. 908,047.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed February 7, 1908. Serial No. 414,782.

To all whom it may concern:

Be it known that I, ABRAHAM TAYLOR, a citizen of the United States, residing at Cresson, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Lubricators for Car-Wheels; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in car wheels and especially in the provision of means for replacing the bearing portion of the wheel when it becomes worn, and affording a convenient lubricating feature, whereby the bearing surface may be at all times thoroughly lubricated.

The invention comprises various details of construction, combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

I illustrate my invention in the accompanying drawings, in which:—

Figure 1 is a perspective view of my improved car wheel. Fig. 2 is a side elevation the threaded cap being removed from the boxing. Fig. 3 is a vertical sectional view. Fig. 4 is a detail view of a substitute threaded ring. Fig. 5 is a detail perspective view of the bearing box removed. Fig. 6 is a longitudinal view through the bearing box. Fig. 7 is a cross sectional view through the box, and Fig. 8 is a detail perspective view of a slight modification of the invention.

Reference now being had to the details of the drawings by letter, A designates a car wheel of the type commonly employed upon mining cars, although it will be understood that my invention is to be utilized upon any form of wheels or rollers. Said wheel has the integral spokes B radiating from a central hollow hub portion B'. Said hub portion has its inner circumferential wall of corrugated outline to receive the bearing box D, having the corrugations D' radiating therefrom and which boxing is adapted to be inserted within said hub with corrugations D' entering the grooves D² formed in the inner surface of the boxing in the manner shown in Fig. 2 of the drawings. Said boxing, de-

tails of which are shown in Figs. 5 to 7 inclusive, has a central bearing aperture E, and the corrugations D' have threads D³ formed about their outer ends, said threads being adapted to receive either a cap F in the manner shown in Fig. 3 of the drawings or a threaded ring G illustrated in Fig. 4. Said cap F has a squared projecting portion F' for convenience in applying a wrench thereto for screwing the cap to or over the corrugated portions of said bearing boxing.

It will be noted upon reference to Fig. 2 of the drawings that there are oil ducts K intermediate the corrugated portions of the boxing and that at the inner end of each oil duct is an aperture N, shown clearly in Fig. 5 of the drawings, which apertures lead through the wall of the boxing whereby oil may flow to the bearing surface of the boxing in whatever position the wheel may be in. Said boxing has a shouldered portion J illustrated in Fig. 6 of the drawings which, when the boxing is inserted within the hub of the wheel, has a bearing against the flanged face of the wheel and limits the movement of the box in one direction. When the boxing is adjusted in place within the hub of the wheel, the end having the threaded corrugations projects through the wheel a sufficient distance to allow the cap or ring to be fitted to said corrugations in the manner shown in Fig. 1 of the drawings. It will be noted that the cap F has a chambered portion F² and an oil feeding aperture F³ is formed centrally therein and through which oil may be fed from an oil cup or any other suitable receptacle.

It will be noted, upon reference to Fig. 3 of the drawings, that an annular groove I is formed in the wall of the bearing surface of the boxing and into which annular groove the various apertures N lead, thus forming means whereby the lubricant may flow freely about the bearing surface of an axle at a position where the greatest weight comes upon said axle.

Referring to Fig. 8 of the drawings will be seen a slight modification of my invention, in which lugs Q are formed integral with the hollow hub of the wheel and which lugs are apertured for the reception of the fastening bolts R, said bolts being held in one or another of the grooves S formed in the lugs S' which are cast integral with the hollow hub of the wheel. In said modification, the disk T is without threads and is held in place by

means of said bolts. After a supply of oil has been placed within the cap, it will run through the oil ducts K, which are inclined downward toward the apertures N, into the interior of the boxing where it will thoroughly lubricate the bearing surface of the axle. When the boxing becomes worn, it may be readily replaced by a new one without destroying the wheel which is necessary with the ordinary forms of wheels as now constructed.

It will thus be noted that, by the provision of my improved detachable bearing boxing for wheels, a considerable saving is afforded by utilizing the main portion of the wheel by simply replacing the worn out boxing.

What I claim to be new is:—

1. A car wheel having a hollow hub portion, the wall of which is corrugated on the inside, a removable bearing boxing having a corrugated circumference with inclined oil ducts intermediate the corrugations of the boxing, said ducts communicating with the interior of the bearing through apertures at the inner ends of the corrugations of the boxing, and a cap fitted to the end of the boxing and holding the same within the hub of the wheel, as set forth.

2. A car wheel having a hollow hub portion, the wall of which is corrugated on the inside, a removable bearing boxing having a corrugated circumference with inclined oil ducts intermediate the corrugations of the boxing, said ducts communicating with the interior of the bearing through apertures at the inner ends of the corrugations of the boxing, the ends of said corrugations of the boxing having threads thereon which project through the hub of the wheel, and a threaded

cap fitted to the threaded portions of the boxing, as set forth.

3. A car wheel having a hollow hub portion, the wall of the latter having corrugations on the inside thereof, a bearing box provided with a series of corrugations about its circumference which are spaced apart with inclined oil ducts intermediate said corrugations, which ducts communicate through apertures in the bearing surface of the boxing, said bearing surface being provided with an annular groove into which said apertures lead, said corrugations of the boxing having threaded portions which project through the boxing, a cap fitted to the threaded portions of the boxing and forming an oil chamber from which oil is fed into said ducts and allowed to run by gravity to the bearing surface of the boxing, as set forth.

4. A car wheel having a hollow hub portion, the wall of which is corrugated on the inside, a bearing boxing having a series of radial corrugations formed on the outer circumference thereof with inclined oil ducts intermediate the corrugations, which ducts communicate with the bearing surface of the boxing through apertures at the inner ends of said ducts, said boxing having a flange adapted to bear against the face of the wheel to limit the movement of the boxing in one direction, threads about the corrugations, and an apertured cap fitted to the threaded portions of the boxing, as set forth.

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

ABRAHAM TAYLOR.

Witnesses:

A. L. HOUGH,

FRANKLIN H. HOUGH.