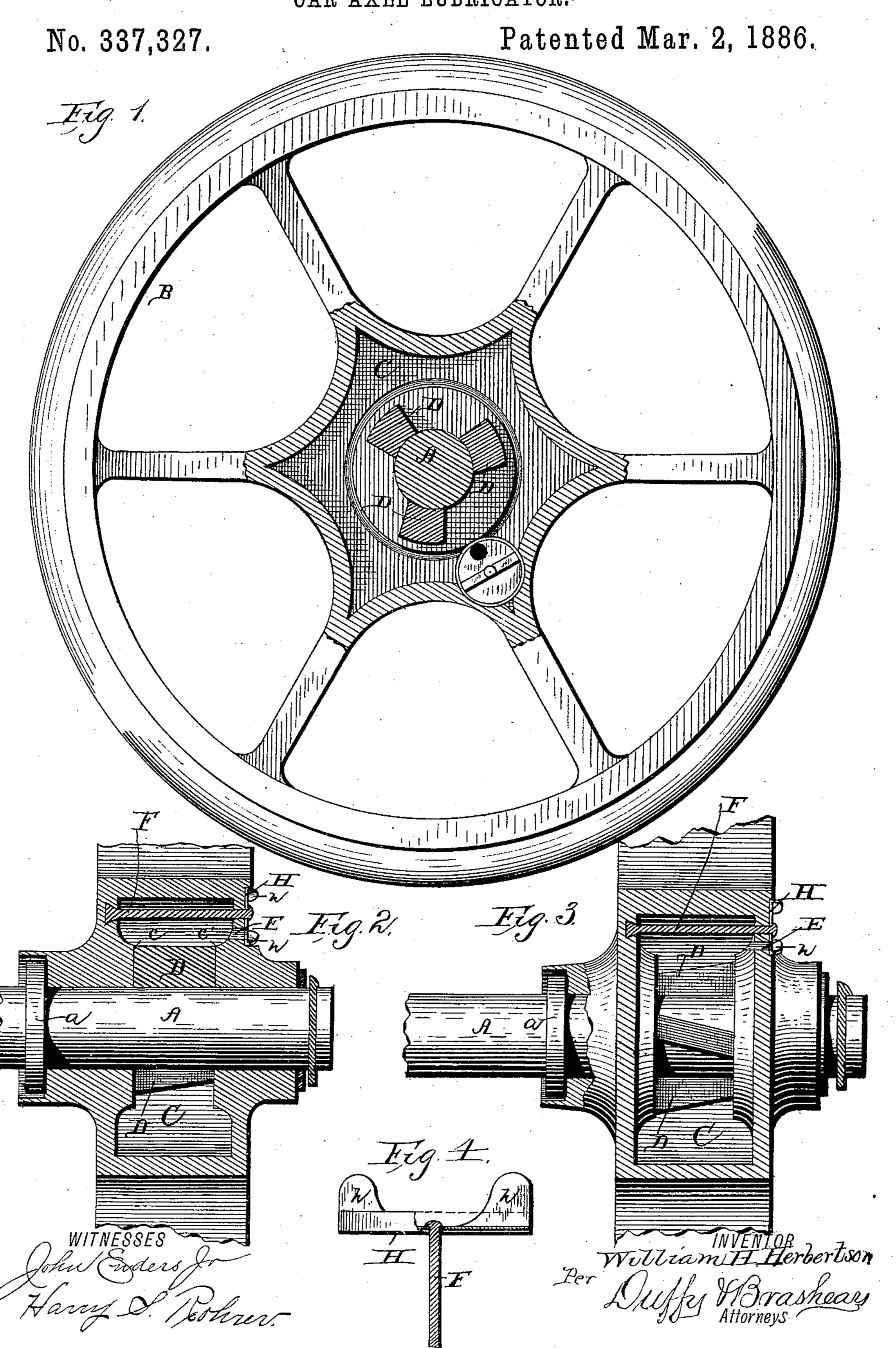
W. H. HERBERTSON.
CAR AXLE LUBRICATOR.



## United States Patent Office.

WILLIAM H. HERBERTSON, OF BROWNSVILLE, PENNSYLVANIA.

## CAR-AXLE LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 337,327, dated March 2, 1886.

Application filed December 24, 1885. Serial No. 186,632. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. HERBERT-SON, of Brownsville, in the county of Fayette and State of Pennsylvania, have invented cer-5 tain new and useful Improvements in Car-Axle Lubricators; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains 10 to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention has relation to lubricating 15 devices for car axles; and it consists in the improved construction, arrangement, and combination of parts, which I shall proceed to fully describe, and the particular points of novelty in which I shall specifically point out

20 in the claims hereto appended.

In the accompanying drawings, Figure 1 is a view in elevation, partly in section, of a car wheel and axle embodying my improvements. Fig. 2 is a sectional view through the hub, the 25 axle being shown in position in elevation. Fig. 3 is a section through one side of the hub, showing its interior construction; and Fig. 4 is a detail view showing the cap for the oil-chamber.

Like letters of reference mark the same parts in all the figures of the drawings in

which they may occur.

Referring to the drawings by letters, A is the spindle of the axle, which is provided with 35 the usual collar, a, and any suitable means for preventing the accidental removal of the wheel therefrom.

B is the wheel, having a hollow hub, C.

D D D are three bars, which are fitted and 40 held between the inner surfaces, c c', of the front and rear sides of the hub. The inner sides of these bars are curved to fit closely to the spindle, and their longitudinal axes are inclined to the longitudinal axis of said spin-45 dle. They are fitted rigidly in position in the hub, so that they will always turn therewith.

E is a channel drilled through the front of the hub to give communication with the inte-

rior thereof.

50 F is a rod or pivot rigidly secured in the hub, and projecting slightly beyond the front thereof, and has pivoted upon it a cap, H,

which serves to cover the opening of the channel E. This cap is provided with projections h, by which it may be readily turned, and a 55 perforation which may be made, when desired, to coincide with the channel E.

Oil being introduced into the central cavity of the hub through the channel E will fall on the bars M, and be carried around, so as to 60 thoroughly lubricate every portion of the spindle. When the wheel revolves in one direction, the oil will be carried by these bars, owing to their inclination, toward the outer end of the spindle, and if in the other direc- 65 tion toward the inner end. As the wheel revolves, the oil is continuously thrown about in the hub-chamber, and as the channel through which the oil is introduced is tightly closed by means of its cap there is no waste of oil, and 70 consequently a great saving is effected.

The hub has an inner extension, C', which covers the collar a of the spindle and prevents any drainage or dirt from the car collecting at

this point and absorbing the oil.

The cap is held rigidly in position by riveting the end of its pivot, said pivot being cast into the hub at its inner end.

Having thus described my invention, what I claim as new, and desire to secure by Let- 80

ters Patent of the United States, is-

1. In combination, the hub having the central cavity or oil chamber and a channel leading therefrom, a bar cast therein and projecting beyond the front thereof, and a circular 85 cap pivoted on said bar, and provided with a perforation which may be made to register with the channel, when desired, said cap being securely held by riveting the outer end of its pivot-bar, and having projections by which it 90 may be turned, as set forth.

2. In combination, the hollow hub, the inclined bars secured therein, and having their inner sides curved to fit the spindle, the oilchannel through the hub, and a suitable cap 95 pivoted on the hub, substantially as set forth.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

WILLIAM H. HERBERTSON.

Witnesses:

A. C. Cock, W. H. AMMON.