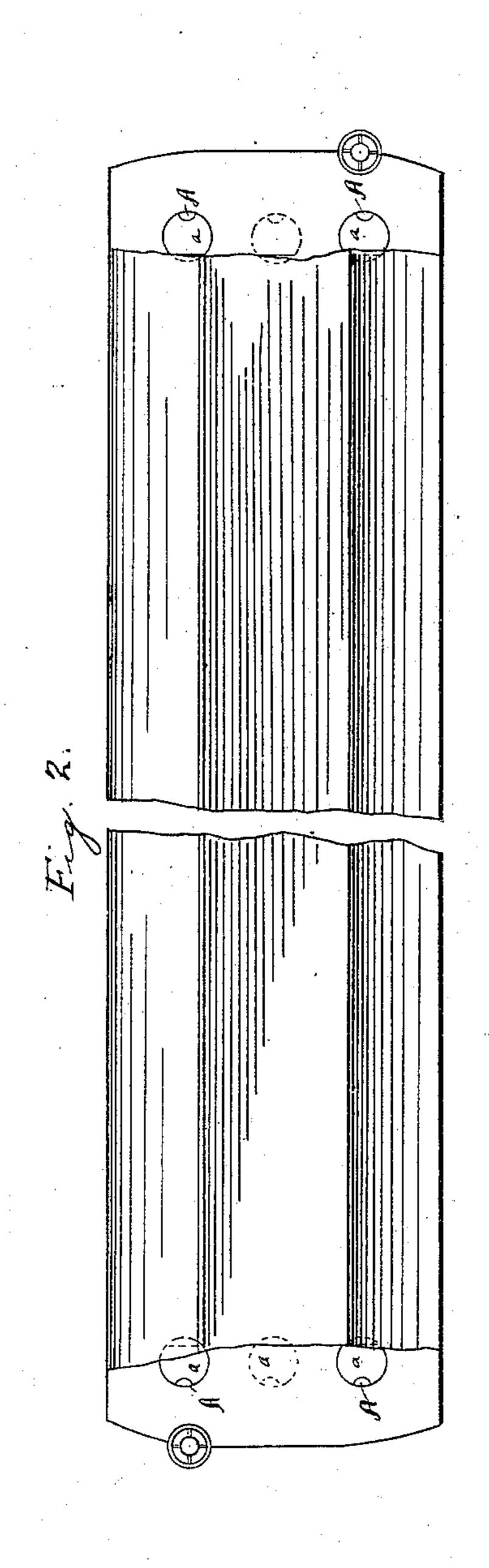
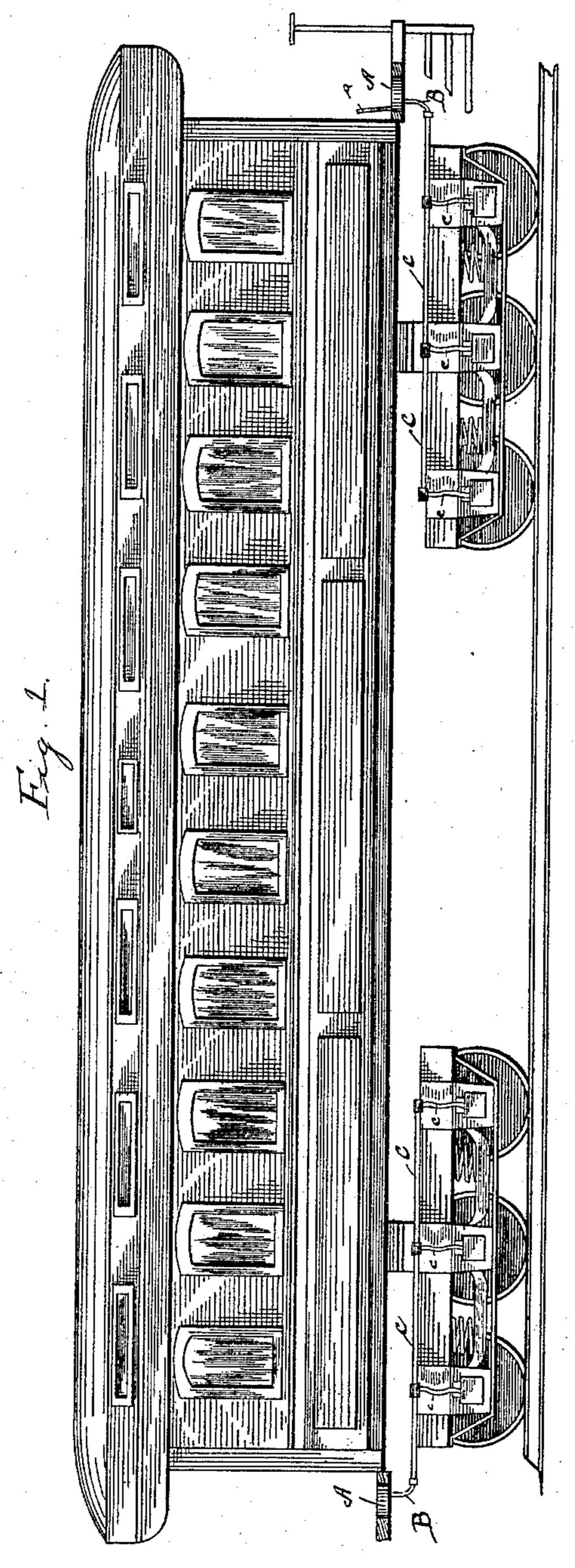
(No Model.)

## R. B. COGAN, W. M. PIERCE & J. C. F. JONES. AXLE COOLER AND LUBRICATOR.

No. 474,294.

Patented May 3, 1892.





WITNESSES
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## United States Patent Office.

ROBERT B. COGAN, WILLIAM M. PIERCE, AND JOHN C. F. JONES, OF BRAD-DOCK, PENNSYLVANIA.

## AXLE COOLER AND LUBRICATOR.

SPECIFICATION forming part of Letters Patent No. 474,294, dated May 3, 1892.

Application filed May 23, 1891. Serial No. 393,909. (No model.)

To all whom it may concern:

WILLIAM M. PIERCE, and JOHN C. F. JONES, citizens of the United States, residing at Brad-5 dock, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Lubricating and Cooling Devices for Railway-Cars, &c.; and we do hereby declare the following to be a full, clear, to and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention has relation to that class of lubricating and cooling devices for railwaycars in which reservoirs for lubricants or cooling mediums are carried by the train and connected with the journals; and it has for its 20 object to provide an entirely practical and effective device of the character stated which shall possess all the advantages of those heretofore constructed and other advantages not found therein and at the same time be more 25 simple in its construction than those heretofore provided.

To these ends the invention consists in certain peculiarities in the construction, arrangement, and combination of the several parts, 30 substantially as hereinafter described, and particularly pointed out in the subjoined claim.

In the drawings, Figure 1 represents a side elevation of a railway-car with our improved 35 lubricator and cooling device attached thereto. Fig. 2 represents a plan in detail with a portion of the car broken away, exhibiting the reservoirs on opposite sides of the platform in full lines, and also a reservoir centrally 40 located upon said platform in dotted lines.

Our improved lubricating and cooling apparatus consists of reservoirs or feeders A A A A, located, preferably, adjacent to the steps on each car-platform. These reservoirs are pro-45 vided with lids or covers a a, &c., and are flush with the car-platforms when closed, offering no obstruction to passengers when crossing the same. Extending from the under side or bottom of said reservoirs are flexible con-50 necting tubes or hose B B B, which are secured to independent lubricating pipes or tubes C C C and which lead directly to the journal-boxes D D D by means of small tubes I

c c c, and feeding the lubricant to said boxes. Be it known that we, Robert B. Cogan, | A single reservoir can be put in the platform 55 on each end of a car, as shown in dotted lines, Fig. 2, of the accompanying drawings, and said flexible tubes can lead to opposite sides of a truck and perform the same functions as those previously referred to.

> It frequently happens, but more especially with baggage-cars, that the internal load of said cars are unequally distributed, and the friction of the bearings becomes so great that the lubricant is forced out, and conse- 65 quently the car-journal becomes hot and finally burns the waste-packing and lubricant. When this occurs, it is not necessary to run a train to the nearest water-station to cool said box; but the reservoirs A A, &c., can be filled 70 with water while the cars are running or with other cooling material or substances, thus saving valuable time and, perhaps, preventing the car catching on fire, which has frequently happened.

We do not claim, broadly, a lubricating or cooling device for railway-cars in which is employed reservoirs connected with the axlejournals, since we are aware that such construction is not broadly new.

Having described our invention, that which we desire to secure by Letters Patent is—

The combination, with a railway-car, of the herein-described lubricator and cooling device for the journals thereof, comprising one 85 or more reservoirs secured to each platform of the car and each having a cover flush with the top of said platform when closed, independent lubricating-pipes C, each of which extends along the length of one of the trucks 90 of the car, a flexible tube B, connecting each of said pipes with a reservoir and entering the latter at the bottom thereof, and a series of flexible tubes or pipes c, connecting the same with the journal-boxes of the trucks, 95 substantially as shown and described.

In testimony that we claim the foregoing we hereunto affix our signatures this 13th day of May, A. D. 1891.

> ROBERT B. COGAN. L. S. WILLIAM M. PIERCE. L. S. JOHN C. F. JONES. L. S.

In presence of— CHARLES LARGE, M. E. HARRISON.