

J. E. BERING.
Car-Axle Boxes.

No. 145,146.

Patented Dec. 2, 1873.

Fig. 1.

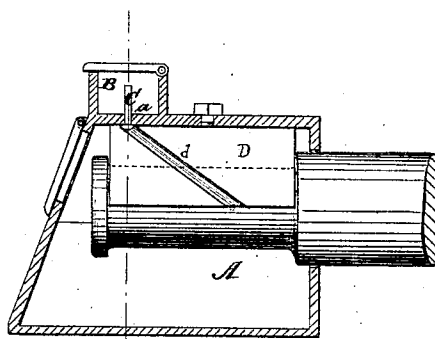
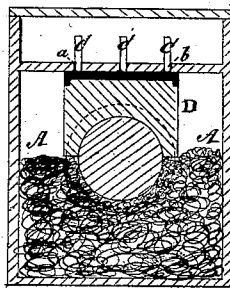


Fig. 2.



Witnesses.
G. Matthews.
Edwin A. Hemon.

Inventor.
James Edward Bering
Per *Robert C.*
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES E. BERING, OF NEWBURG, NEW YORK.

IMPROVEMENT IN CAR-AXLE BOXES.

Specification forming part of Letters Patent No. 145,146, dated December 2, 1873; application filed June 28, 1873.

To all whom it may concern:

Be it known that I, JAMES EDWARD BERING, of Newburg, in the county of Orange and State of New York, have invented a new and Improved Automatic Lubricator for Hot Journals; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 is a vertical longitudinal section of the axle, showing the journal and brasses in position; and Fig. 2 is a transverse vertical section, showing the relative position of the tallow plugs.

The invention relates to means whereby may be prevented the liability of car-axle boxes to become heated by friction when in want of sufficient lubricating material; and it consists in a novel method of overcoming this difficulty, as hereinafter fully described, and pointed out in the claims.

In the drawing, A represents the ordinary car-axle box, in which is received the brass D that incloses the journal, and the lubricant which prevents it from becoming heated. From an accidental deficiency in the proper quantity of the lubricant, the journals frequently become heated to such an extent as not only to set the boxes on fire, but to set fire to and destroy one or more cars of a train. In order to avoid this I cast or otherwise affix a supplementary oil-reservoir, B, on the box A, the box and the reservoir being perforated, as at *a b*. These perforations are filled up with plugs C, made of tallow and stearic acid, or

with plugs of any other substance, which is fusible at a low degree of temperature. The holes *a b* register with an oblique hole, *d*, of the brass D. Through this hole *d* the heat from bearing is quickly transmitted to the tallow plug or plugs C, which disappear when the degree of their fusibility is reached.

Under ordinary circumstances, or while the journals are kept properly lubricated, my invention is inoperative, but as soon as the journal begins to heat from the lack of a lubricant, the plugs melt and allow the contents of the reservoir to be emptied into the journal-box, and thus supply the latter with sufficient lubricating material to reduce the friction, and thereby lower the temperature of the journal to its proper working condition.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-axle box the auxiliary reservoir B filled with fluid lubricant, and having a passage to the axle, closed with a plug fusible at a low temperature, substantially as and for the purpose described.

2. The auxiliary box B and axle-box A, cast together and having the holes *a b* in the division-plate, combined with brass bearing D having a duct, *d*, leading to periphery of journal, as and for the purpose described.

J. EDW. BERING.

Witnesses:

OLON C. KEMON,
T. D. DURBIN OURAND.