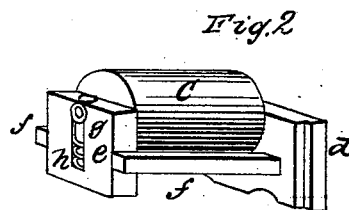
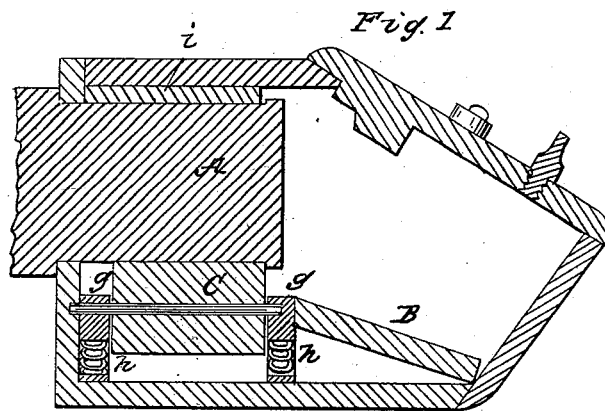


A. L. RAPLEE.

Car-Axle Box.

No. 107,408.

Patented Sept. 13, 1870.



witnesses  
Sydney C. Smith  
William Dyer

Inventor  
Abijah L. Raplee  
by his attorney J. C. Robbins

# UNITED STATES PATENT OFFICE.

ABIJAH L. RAPLEE, OF EDWIN, ASSIGNOR TO CARRIE R. LAYMAN, OF  
PAINTED POST, NEW YORK.

## IMPROVEMENT IN JOURNAL-BOXES FOR RAILWAY-CARS.

Specification forming part of Letters Patent No. **107,408**, dated September 13, 1870.

### *To all whom it may concern:*

Be it known that I, ABIJAH L. RAPLEE, of Edwin, in the county of Steuben and State of New York, have invented a new and useful Improvement in the Journal-Boxes of Railway-Cars; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, which forms a portion of this specification.

Figure 1 of said drawing is a vertical section of my improved journal-box, and also of the journal portion of a car-axle in its proper position within said box; and Fig. 2 is a perspective view of the oiling portion of said journal-box detached therefrom.

My invention consists of an improvement upon that class of journal-boxes whose internal arrangements are such that the oil is continuously elevated and applied to the under surface of the axle-journals by means of pivoted rollers that are forced upward by springs into close contact with said journals, while the lower portions of said rollers are immersed in the oil in the journal-boxes.

My improvement consists in placing the oiling-roller C, its pivot-bearings *g g*, and elevating-springs *h h* all within an independent frame, *d e f f*, of such shape and proportions that it will readily fit into the usual sizes and shapes of journal-boxes, so that when any accident shall happen to an oiling-roller or to its bearings the said roller and its supporting-frame can be quickly removed from the box, and their place be instantly supplied by a perfect oiling-roller and its supporting-frame,

thereby guarding against loss of time, and insuring at all times perfectly-operating journal-boxes.

The drawing represents the roller-supporting frame as composed of the heads *d e* and the side bars, *f f*, slits being formed in said heads for the reception of the springs *h h* and the pivot-bearings *g g* of the oiling-roller C; but I do not limit myself to any precise shape of said roller-supporting frame, nor to any precise method of constructing the same, provided its shape and construction be such as will enable it to securely hold the pivot-bearings of the oiling-roller and their actuating-springs, and enable said frame to be readily inserted into or removed from a journal-box.

The plate B within the journal-box should be of such size, shape, and weight as will enable it to securely hold the roller-supporting frame in its proper position within said box.

Having thus fully described my improvement in the journal-boxes of railway-cars, what I claim therein as my invention, and desire to secure by Letters Patent, is—

In combination with an oiling-roller, C, which is provided with spring-actuated pivot-bearings *g g*, and is frictionally rotated by and with the axle-journal, an independent and removable supporting-frame, *d e f f*, constructed substantially as described, and for the purpose specified.

ABIJAH L. RAPLEE.

Witnesses:

SAML. ERWIN,  
AMELIA HAMMOND.