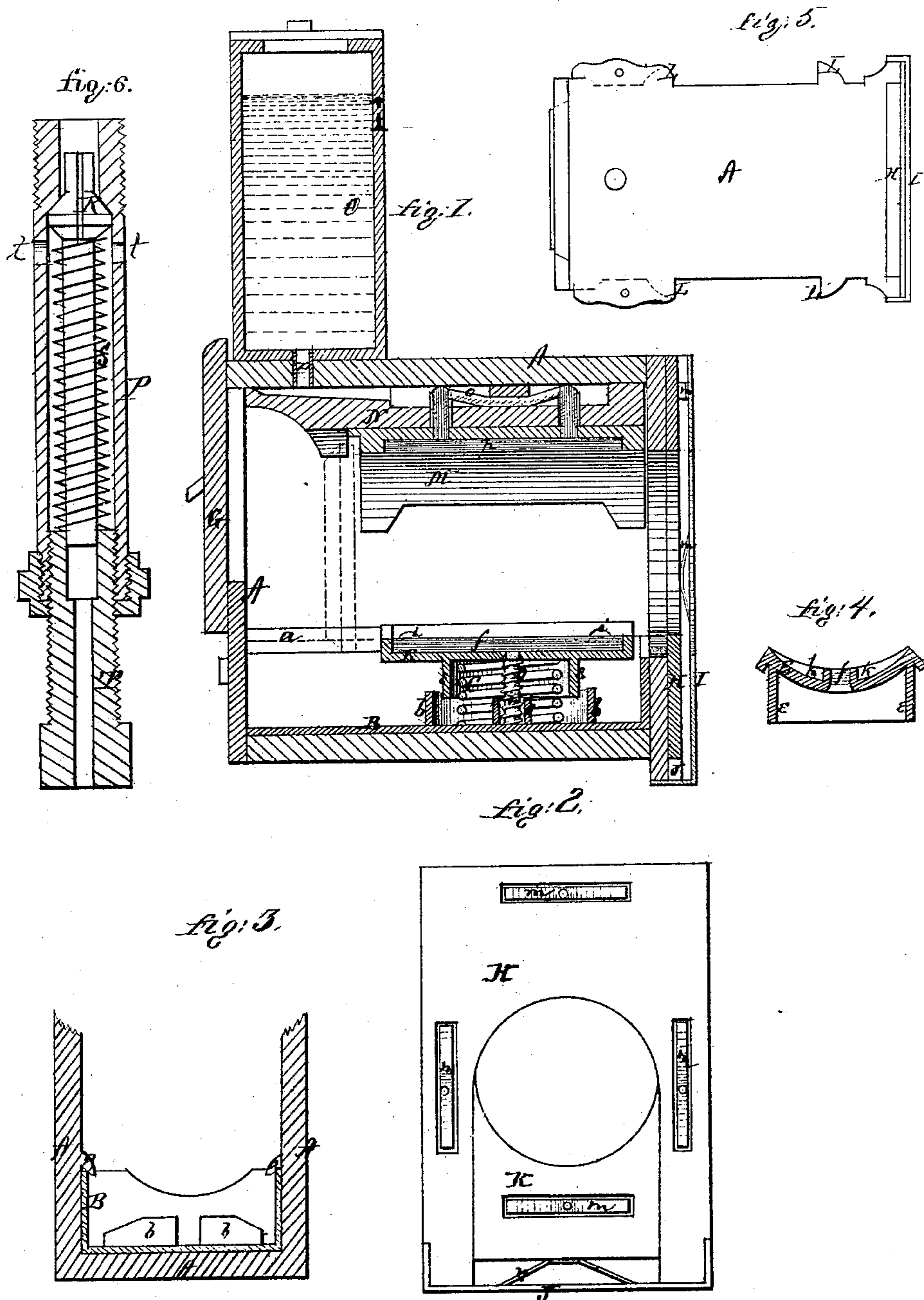


E. VON JEINSEN

Car Axle-Box.

No. 109,159.

Patented Nov. 8, 1870.



Witnesses
 J. L. Cuert
 J. E. Hutchinson

Inventor
 Ernest von Jeinsen
 per
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 attys.

United States Patent Office.

ERNEST VON JEINSEN, OF OMAHA, NEBRASKA.

Letters Patent No. 109,159, dated November 8, 1870.

IMPROVEMENT IN JOURNAL-BOXES FOR CARS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, ERNEST VON JEINSEN, of Omaha, in the county of Douglas and in the State of Nebraska, have invented certain new and useful Improvements in Journal-Boxes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

The nature of my invention consists in the construction and arrangement of a "journal-box" for railroad-cars, as will be hereinafter fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a longitudinal vertical section of my entire journal-box;

Figure 2 is a rear view of the box, showing the dust-excluder;

Figure 3 is a transverse vertical section of the lower portion of the box;

Figure 4 is a transverse vertical section of the lubricator; and

Figure 5 is a plan view of the box.

Figure 6 is a vertical section of the valve in the oil-box.

A represents the box proper, provided with a rib, *a*, on the inside of each side, said ribs running horizontally from end to end.

In the bottom of the box A is placed a drawer, B, the sides of which come up under the ribs *a a*, as shown in fig. 3.

The ribs *a a* being curved on the upper and outer sides, all the oil which slops around on the sides of the box runs back into the drawer.

In the bottom of the drawer B are placed guides *b* and *d*, to receive and hold the springs C and D in their proper places.

The large outside spring C supports and holds the lubricator E against the under side of the journal, there being on the under side of said lubricator a downward-projecting collar or flange, *e*, within which the upper end of the spring C is fitted.

On the upper side of the lubricator E is a longitudinal groove, in which felt, *f*, is inserted, to give oil to the journal, the oil being drawn up by two or more wicks *h*, put in the small spring D in such a manner that the spring has play enough to expand and contract.

The upper end of the spring is inserted in a countersunk hole in the lubricator E, so that both springs

have guides above and below and are bound to stay in their proper places.

The lubricator E is the full length of the journal less about one-eighth of an inch, to prevent friction; and the diameter of the journal is the diameter of the lubricator also.

On each side of the felt *f* is a groove, *k*, for receiving the superfluous oil from the journal, which oil runs back, through holes *i i*, into the drawer.

The front end of the box A is closed by a sliding cover, G, as shown in fig. 1.

On the rear side of the box is placed the dust-excluder H, held in place by a steel or brass plate, I, screwed onto the box in the best practicable manner.

The lower end of the plate I is bent inward under the box, so as to form a rest for the dust-excluder H, which has a steel strap, J, secured to its under or lower end.

On the outer side of the excluder H are springs *m m*, which bear against the inner side of the plate I so as to hold the dust-excluder against the end of the box.

This dust-excluder consists of a wooden piece or board, with an opening for the journal to pass through.

That part, K, from the opening downward, is made loose or separate, as shown in fig. 2, and is provided, at its lower edge, with a spring, *n*, which rests upon the strap J, so that, when the box settles down through long use, this piece K will follow the journal close.

The pieces L L, forming guides for the pedestals of the car-frame, are chilled on the sides of the box A, in the usual manner.

Above the journal are placed the bearing M, with felt *p*, and wedge N, with wick *o*, for which, with the oil-box O on top, I have made a separate application for patent.

From the oil-box O a tube, P, leads downward into the box above the wedge N. This tube is open at its upper end, with a valve-seat formed within near said end.

In this tube is placed the valve R, pressed upward against the seat by the spring S, which rests on a set-screw, T, at the lower end of the tube.

As the car passes over the joint between the rails, the valve is moved down sufficient to allow a small quantity of oil to pass down and escape through the openings, *t*, in the tube.

The amount of oil thus escaping is regulated by the set-screw T.

When the car is not in motion, the valve is held closed by the spring S.

The set-screw T is also hollow, so that the oil which does not escape through the openings *t t* may pass downward through the same.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

1. The drawer B, fitting under the ribs *a a* in the box A, and provided with guides *b d*, substantially as and for the purposes herein set forth.

2. The combination of the drawer B with its guides

b d, springs C D, one or more wicks *h*, and the lubricator E, provided with felt *f*, grooves *k k*, holes *i i*, and collar or flange *e*, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 11th day of July, 1870.

ERNEST VON JEINSEN.

Witnesses:

THOS. J. CLUME,

W. A. RANSOM.