(No Model.)

C. L. MOREHOUSE.

JOURNAL BOX.

No. 336,341. Patented Feb. 16, 1886.

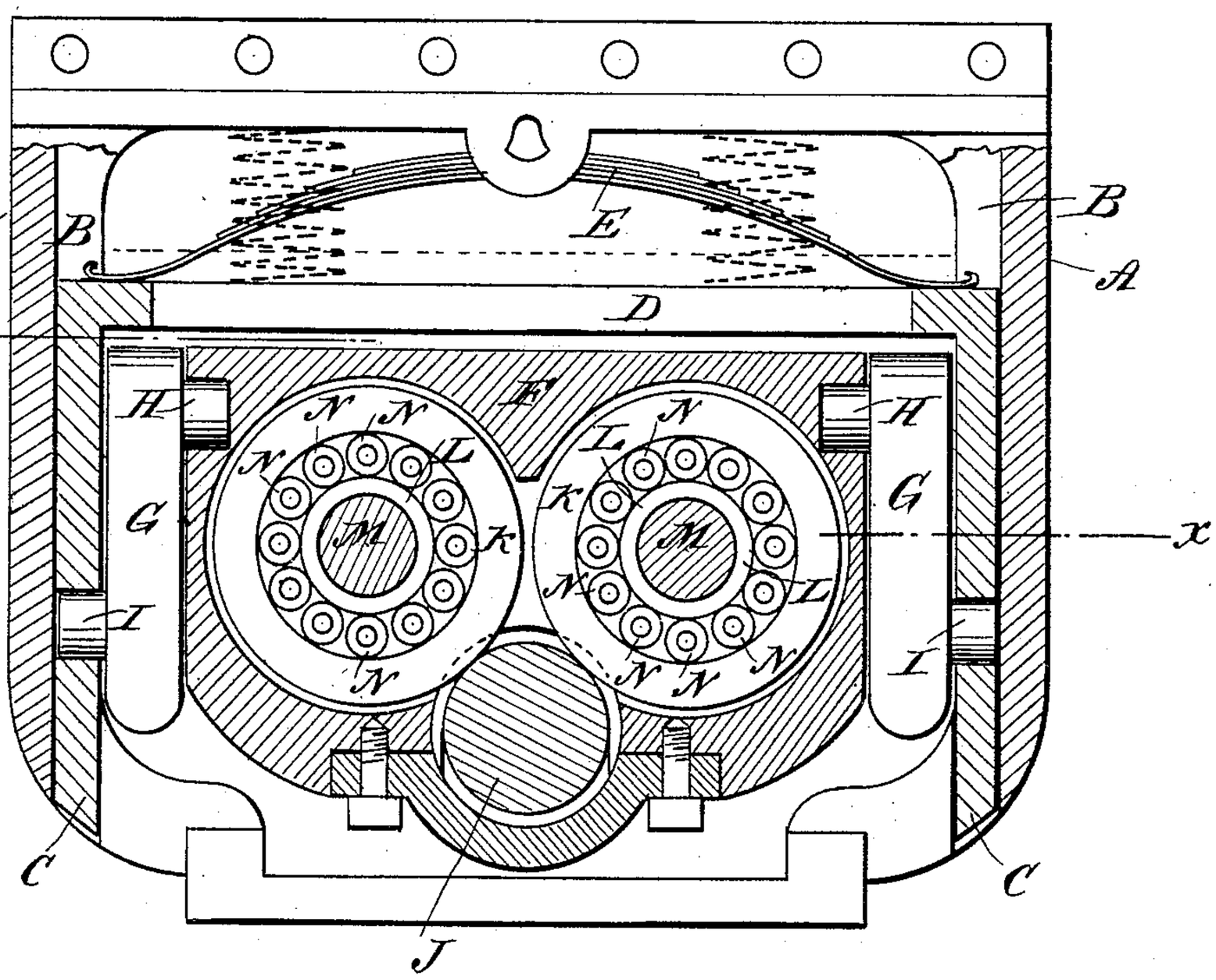

Fig. 1.

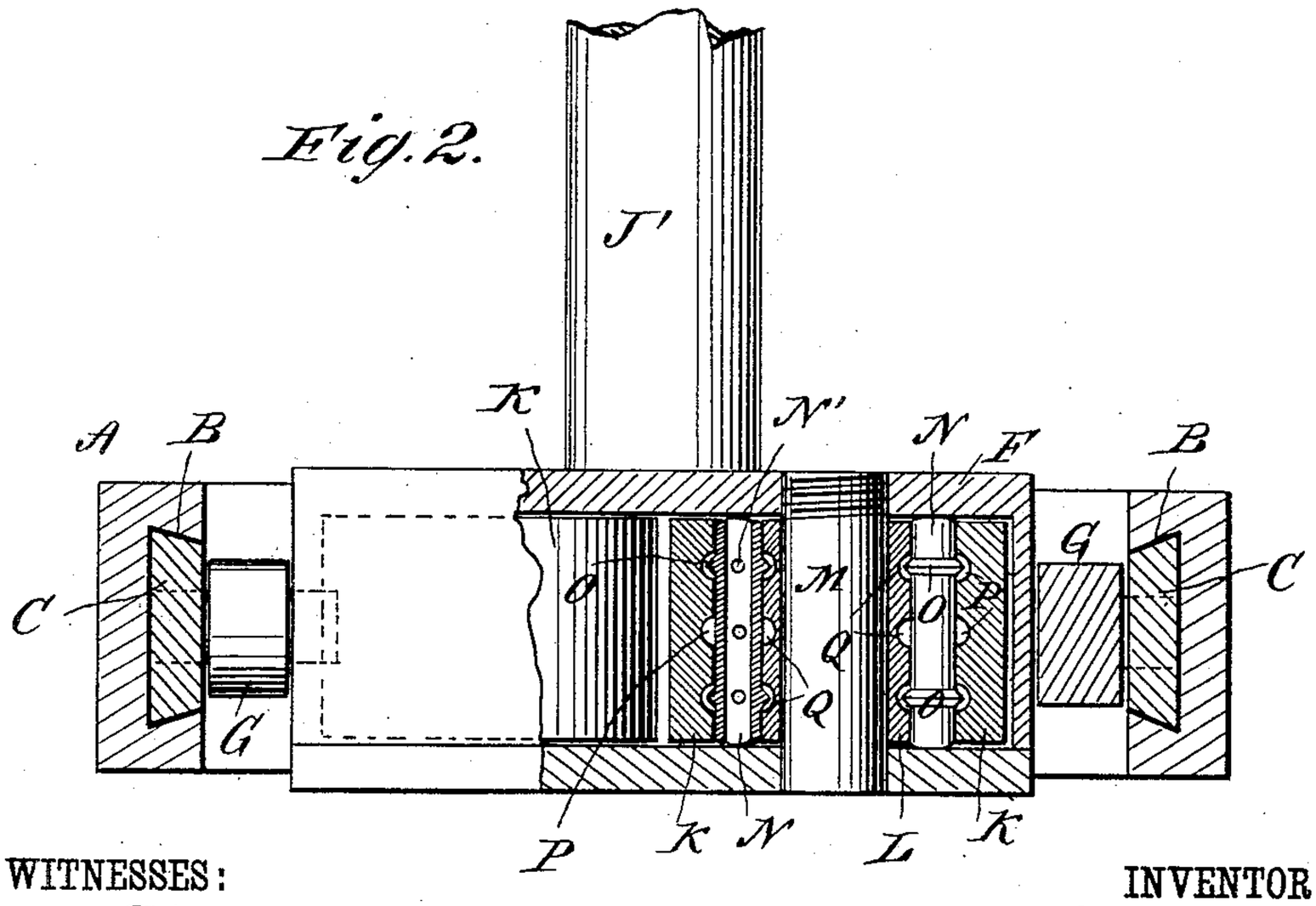

Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

CHARLES L. MOREHOUSE, OF BROOKLYN, NEW YORK, ASSIGNOR TO MARY E. MORGAN AND GEORGE L. GARRIGUES.

JOURNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 336,341, dated February 16, 1886.

Application filed August 18, 1885. Serial No. 174,748. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. MOREHOUSE, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Journal-Box, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved journal-box by which the friction is reduced materially and a more easy and gentle motion of the car is obtained.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a longitudinal sectional elevation of my improved journal-box. Fig. 2 is a sectional plan view of the same on the line *x x* in Fig. 1.

The pedestal A is secured on the bottom of the truck-frame and projects downward. In the inner edge of each side piece of the pedestal a longitudinal groove, B, is formed, which is preferably dovetailed, and in each of which grooves a slide, C, is placed, united at the top by a cross-piece, D, on which the ends of a spring, E, rest, the center of which rests against a pivot in the top cross-piece of the pedestal. In case spiral springs are used, a bar is placed on the upper ends of the slides C, as shown in dotted lines in Fig. 1. Between the side pieces of the pedestal a box, F, is placed, which is supported by a bar, G, at each end, the bars G having the top and bottom pivots, H and I, at opposite sides, the top pivots, H, passing into apertures in the ends of the box F, near the top of the same, and the pivots I passing into apertures in the slides C, thus adapting the box F to swing transversely to the longitudinal plane of the pedestal. The journal J of the axle J′ passes through the lower part of the box, and two steel rings, K, surrounding steel sleeves L, mounted on pivots M in the box F, rest upon the upper side of said journal. Tubular rollers N, parallel with the sleeves L and rings K, are interposed between the sleeves L and rings K, and are provided with collars O. The rings K are provided in the inner surfaces with annular oil-grooves P, and the sleeves L have opposite annular oil-grooves Q. The collars O can run in said grooves. The collars O may be dispensed with, if desired. The tubular rollers N have apertures N′, to permit of a perfect circulation of the oil. The friction is reduced to a minimum, the oil is thoroughly distributed, and, as the box F can swing in the pedestal, the lateral jolts of the wheels are not transmitted to the car-body, which thus runs very smoothly and easily. The box F can slide vertically in the pedestal.

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

1. The combination, with a pedestal, of a journal-box mounted to swing laterally in the same, substantially as herein shown and described.

2. The combination, with a pedestal, of a journal-box mounted to slide vertically and swing laterally in the same, substantially as herein shown and described.

3. The combination, with a pedestal, of bars pivoted in the same and a journal-box pivoted on said bars, substantially as herein shown and described.

4. The combination, with a pedestal, of a vertically-sliding frame in the same, a spring or springs pressing said frame downward, and a journal-box pivoted on the said frame, substantially as herein shown and described.

5. The combination, with a pedestal, of a vertically-sliding frame in the same, bars pivoted on the frame, and a journal-box pivoted on said bars, substantially as herein shown and described.

6. The combination, with the pedestal A, having grooves B in the side pieces, of the bars G, having the pivots H I, and of the journal-box F, substantially as herein shown and described.

7. The combination, with a box, of two pivots, rollers surrounding the pivots and rings surrounding the rollers, against which rings the axle-journal rests, substantially as herein shown and described.

8. The combination, with a box, of pivots on the same, sleeves surrounding the pivots, rollers surrounding the sleeves, and rings surrounding the rollers, against which rings the axle-journal rests, substantially as herein shown and described.

9. The combination, with a pivot, of a sleeve

surrounding it, and provided with external annular grooves, rollers surrounding the sleeve, and a ring provided with internal annular grooves and surrounding the rollers, substantially as herein shown and described.

10. The combination, with a pivot, of a sleeve surrounding it and having external annular grooves, rollers surrounding the sleeve and having external collars, and of a ring surrounding the rollers and having internal annular grooves, substantially as herein shown and described.

11. The combination, with a pivot, of a sleeve surrounding it, tubular apertured rollers surrounding the sleeve, and a ring surrounding the rollers, substantially as herein shown and described.

12. The combination, with a pivot, of a sleeve surrounding it and having internal annular grooves, rollers surrounding the sleeve, and of a ring surrounding the rollers and having internal annular grooves, substantially as herein shown and described.

CHARLES L. MOREHOUSE.

Witnesses:
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C. SEDGWICK.