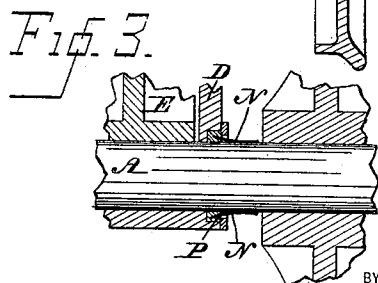
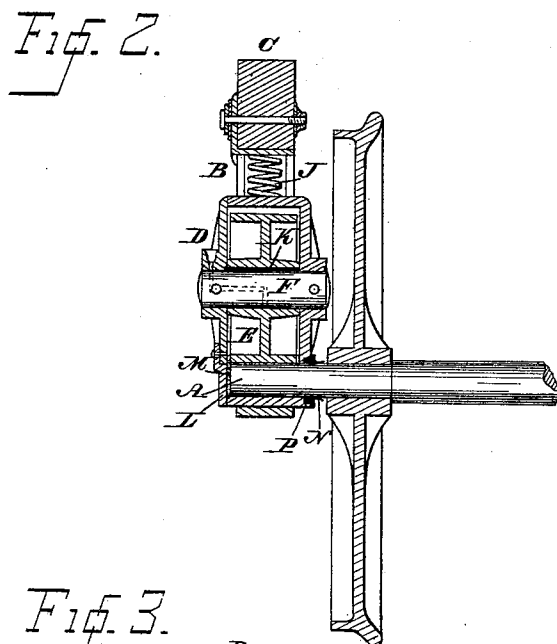
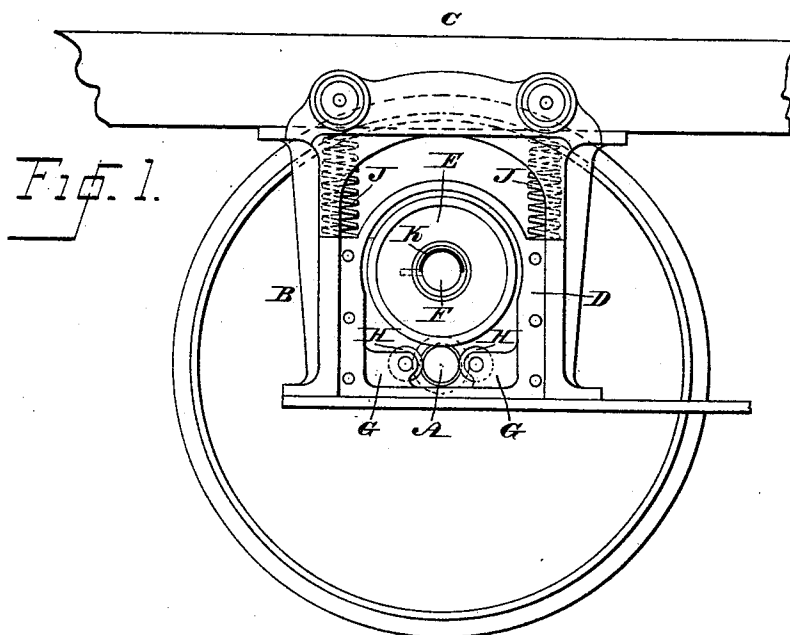


(No Model.)

J. F. MORELL.
JOURNAL BEARING.

No. 351,279.

Patented Oct. 19, 1886.



WITNESSES:

L. Douville
H. A. Jones.

INVENTOR:
Jas. F. Morell.
BY
John D. Schaeffer.
ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES F. MORELL, OF CAMDEN, NEW JERSEY.

JOURNAL-BEARING.

SPECIFICATION forming part of Letters Patent No. 351,279, dated October 19, 1886.

Application filed June 18, 1886. Serial No. 205,559. (No model.)

To all whom it may concern:

Be it known that I, JAMES F. MORELL, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Journal-Bearings, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 represents a side elevation of a journal-bearing embodying my invention. Fig. 2 represents a vertical section thereof, and Fig. 3 represents a section of a detached portion on an enlarged scale.

Similar letters of reference indicate corresponding parts in the different figures.

My invention consists of a journal-bearing formed of a roller which bears against the upper side of the journal, a box fitted in a hanger and supporting said roller, and springs which are interposed between the box and the sill, frame, &c., to which the hanger is secured, whereby the journal rotates on its bearings with but little friction, and the car or vehicle to which the device is applied rides with ease, the journal being also nicely sustained above and on its sides.

It further consists of rollers bearing upon oppositesides of the journal, thus laterally sustaining the same.

It also consists of anti-friction metal applied at various places, as will be hereinafter fully described.

Referring to the drawings, A represents the journal of the axle of a car-wheel of usual construction.

B represents a hanger, which is connected with the sill C of a car-truck and fitted to the box D, in which the journal is mounted.

E represents a roller, which is mounted on a stationary axle, F, the latter being secured to the walls of the box D, said roller being in contact with the upper side of the journal. The lower portion of the box has two arms, G, which extend inwardly or toward each other and form bearings for rollers H, which, as will be seen, bear against opposite sides of the journal. Interposed between the box and the sill are springs J, which receive the weight of the car and transmit the same to the journal.

It will be seen that when the car is in motion the journal rotates in contact with the rollers E H, which latter also rotate, whereby there is reduced friction on the journal and

the car rides with ease, and as the journal has the rollers E H respectively above and on its sides it is nicely sustained and prevented from running irregularly.

The pin or axle F has a facing of lead or other soft or anti-friction metal or material, K, on which the roller E runs, thus preventing heating of the roller and axle and reducing the friction thereof.

The portion of the box D in front of the end of the journal has a removable cap, L, the inner side whereof has a lining of lead or other soft or anti-friction metal or material, M, against which the end of the journal bears, the lateral thrust of the journal being against said lining, so that the journal is sustained at its outer end against the box D, preventing irregular lateral motions, the lining preventing heating of the parts in contact and reducing the friction thereof. The inner side of the box has an annular guard, N, of leather or other suitable material, which encircles the journal, and is secured to a ring, P, the latter being removably fitted to the box. By this provision dust is prevented from entering between the journal and box, and when the guard is worn it may be replaced and readily reapplied in position.

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

1. A journal-box having the journal of the car-axle supported therein and provided with rollers bearing against the same, a hanger supporting said box, and a spring or springs bearing against said box, all of said parts being combined substantially as described.

2. A hanger and a box therein and springs bearing against said box, in combination with rollers mounted on the box and bearing against the top and opposite sides of the journal, substantially as described.

3. The bearing-roller E, in combination with the box D and stationary axle F, the latter having a facing of anti-friction material, substantially as described.

4. The box D, having a cap, L, with a lining of anti-friction material, substantially as described.

JAMES F. MORELL.

Witnesses:

JOHN A. WIEDERSHEIM,
A. P. GRANT.