

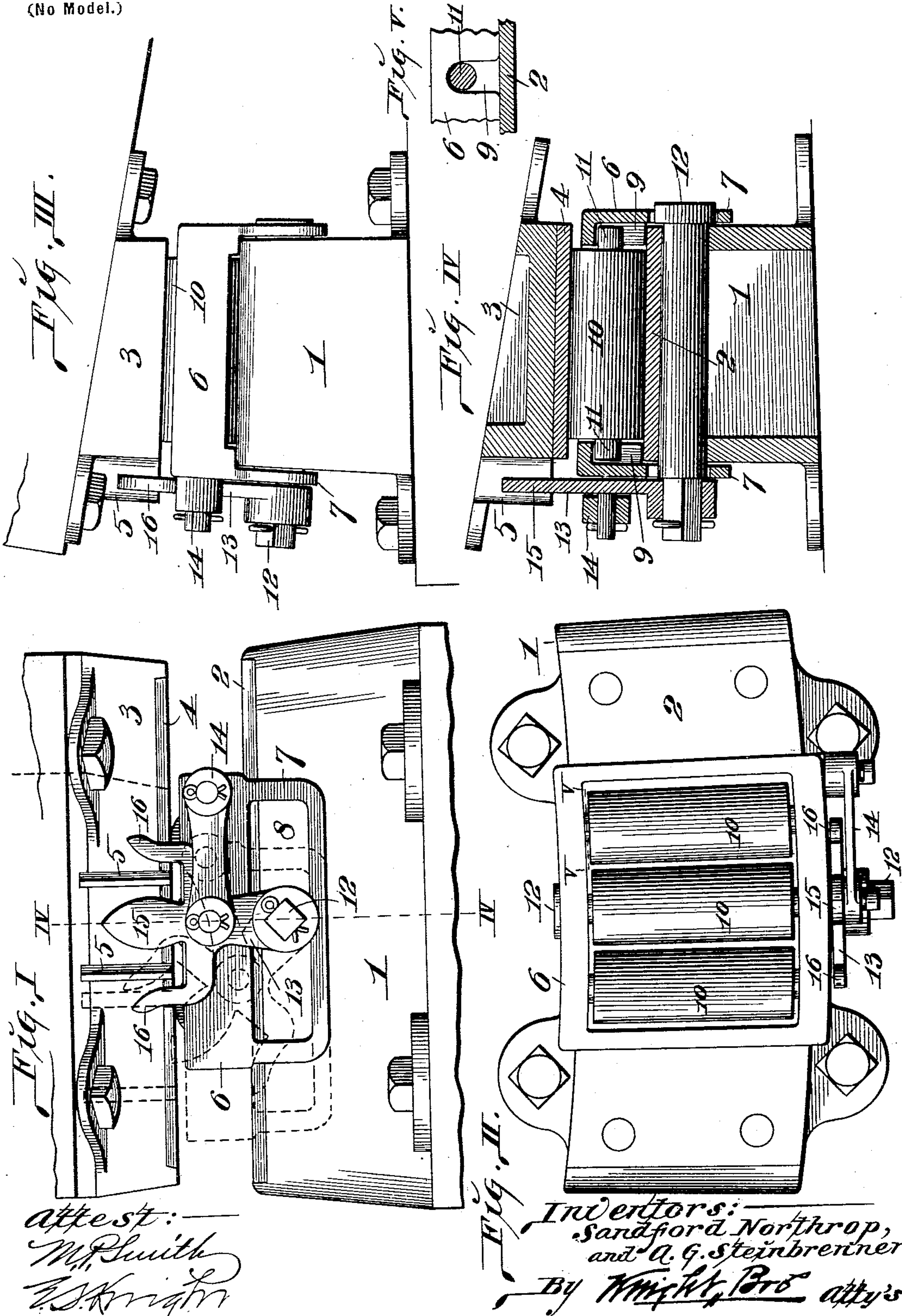
No. 704,088.

Patented July 8, 1902.

S. NORTHROP & A. G. STEINBRENNER.  
SIDE BEARING FOR RAILWAY CARS.

(Application filed Nov. 21, 1901.)

(No Model.)





# UNITED STATES PATENT OFFICE.

SANDFORD NORTHROP AND ANDREW G. STEINBRENNER, OF ST. LOUIS,  
MISSOURI.

## SIDE BEARING FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 704,088, dated July 8, 1902.

Application filed November 21, 1901. Serial No. 83,073. (No model.)

*To all whom it may concern:*

Be it known that we, SANDFORD NORTHROP and ANDREW G. STEINBRENNER, citizens of the United States, residing in the city of St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Side Bearings for Railway-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

Our invention relates to that class of anti-friction-bearings used as supports for the body-bolsters of railway-cars; and the invention consists in features of novelty herein-  
after fully described, and pointed out in the claims.

Figure I is a view in side elevation of our bearing. Fig. II is a top or plan view. Fig. III is an end view. Fig. IV is a vertical sectional view taken on line IV IV, Fig. I. Fig. V is a vertical sectional view taken on line V V, Fig. II.

1 designates the body of the bearings, adapted to be suitably mounted on the truck-bolster of the car to which the bearing is applied. Seated on the body 1 is a hardened wear-plate 2.

3 designates the body-bolster plate, provided with a hardened wear-plate 4 and having at one side thereof vertical ribs 5.

6 designates a roller-receiving carriage on the body 1, having an open top and provided with downwardly-extending sides 7, that contain elongated apertures 8.

10 designates antifriction-rollers, having spindles 11 and located in the carriage 6 to rest on the wear-plate 2 of the bearing-body 1 and extending upwardly through the open top of the carriage to receive the wear-plate 4, carried by the body-bolster plate.

The interior of the carriage sides 7 are grooved to provide pockets for the reception of the roller-spindles 11, and intermediate of the pockets are inwardly-extending wings 9, (see Fig. IV,) that are adapted to rest and ride on the wear-plate 2 of the body 1, whereby the carriage is supported to relieve the roller-spindles from strain of the carriage thereupon in its movement on the body.

12 is a rock-shaft journaled in the body 1. This rock-shaft extends through the elongated

apertures 8 in the sides of the carriage 6 and serves to retain the carriage to the body to maintain it beneath the body-bolster plate 3. Fixed to the rock-shaft 12 is a rocker-arm 13, provided with a central finger 15, positioned between the ribs 5 on the bolster-plate 3, and outer fingers 16, that extend upwardly outside of said ribs.

In the practical use of the bearing the carriage 6 rides on the bearing-body 1 in the manner stated, being supported by the wings 9 in a manner to relieve the spindles of the anti-friction-rollers from strain while the carriage is held to said body by the connection between its sides and the rock-shaft 12. In the movement of the truck-bolster and the body 1, carried thereby, the rocker-arm 13 is rocked with the rock-shaft 12, and the carriage 6 is caused to travel on the bearing-body by the connecting pivot-link 14, which joins the rocker-arm to the carriage. As the carriage moves on the body in either direction the central finger 15 bears against the inside of one of the ribs 5 on the body-bolster plate and one of the outer fingers 16 bears against the outside of the other rib 5, so that the rocker-arm 13 is always maintained in engagement with said body-bolster plate and is prevented from escape therefrom, and said rocker-arm is always in a position to return the roller-carriage to its former location on the reverse movement of the truck-bolster and bearing-body 1.

While we have described the carriage 6 as resting and traveling on the bearing-body 1, it is obvious that its position may be inverted, so that it will travel on the body-bolster plate, in which instance the body-bolster plate would be the equivalent of the body 1, and we therefore do not limit ourselves in this respect to the mounting of the roller-carriage.

We claim as our invention—

1. In a side bearing, the combination of a body, a roller-carriage movably mounted on said body and having sides provided with apertures, a rock-shaft mounted in said body and extending through said apertures, and means carried by said rock-shaft for moving said carriage on said body, substantially as described.

2. In a side bearing, the combination of a



body, a roller-carriage movably mounted on said body and having sides provided with apertures, a rock-shaft mounted in said body and extending through said apertures, and a  
5 rocker-arm fixed to said rock-shaft and arranged to move said carriage, substantially as described.

3. In a side bearing, the combination of a body, a roller-carriage movably mounted on  
10 said body, a rocker-arm supported by said body, a central finger and a pair of outer fingers carried by said rocker-arm, a bolster-plate, and ribs carried by said bolster-plate adapted to receive the engagement of said  
15 rocker-arm fingers, substantially as set forth.

4. In a side bearing, the combination of a body, a carriage movably mounted on said body, rollers mounted in said carriage, and

wings interior of said carriage adapted to rest on said body to support it and relieve the  
20 spindles of said rollers from strain, substantially as described.

5. In a side bearing, the combination of a body, a carriage movably mounted on said body and having apertured sides, wings in-  
25 terior of said carriage adapted to rest on said body to support it, means in said body for holding said carriage thereto, and rollers loosely positioned in said carriage, substantially as described.

SANDFORD NORTHROP.

ANDREW G. STEINBRENNER.

In presence of—

E. S. KNIGHT,

M. P. SMITH.