

(No Model.)

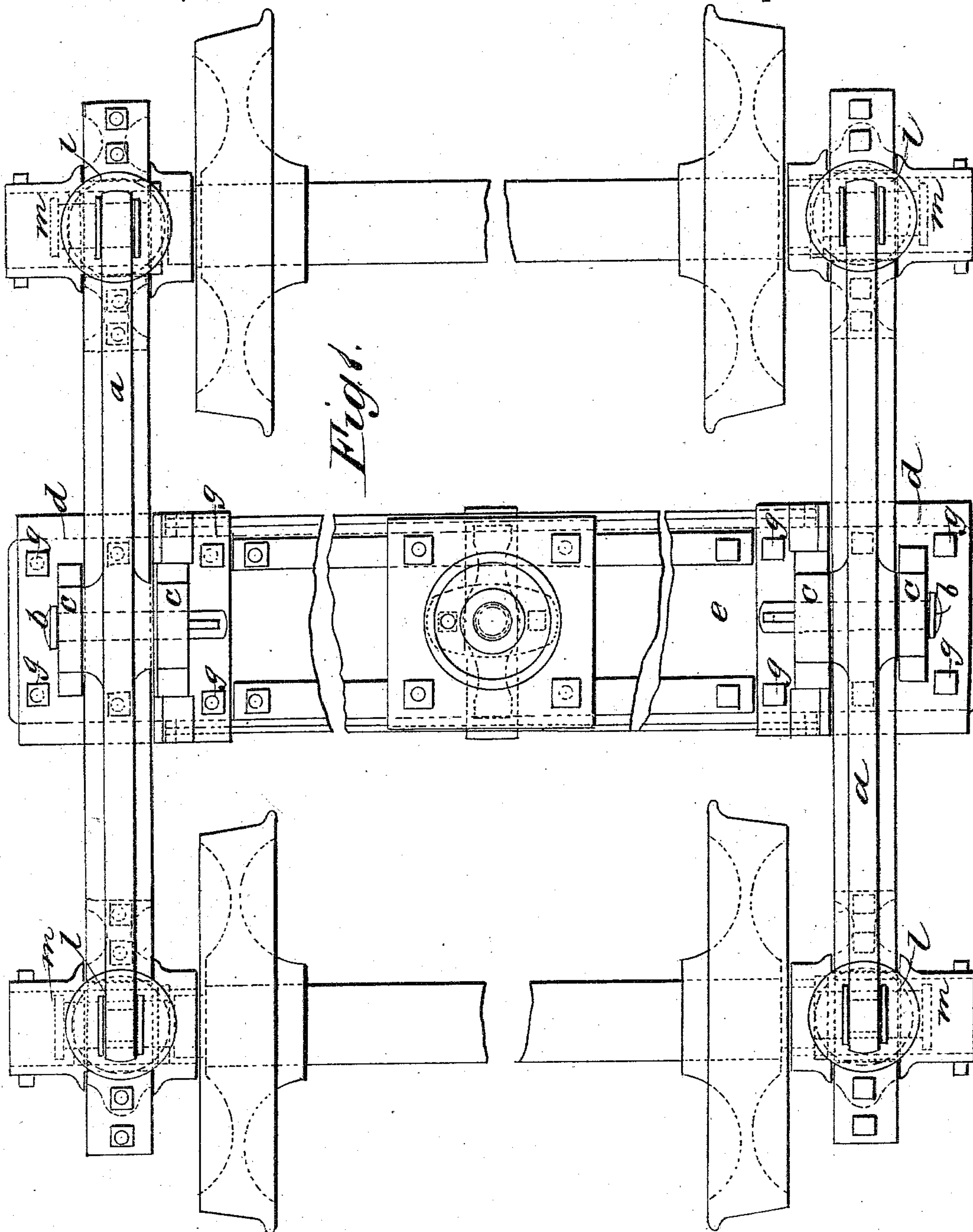
2 Sheets—Sheet 1.

J. R. FISH.

CAR TRUCK.

No. 296,545.

Patented Apr. 8, 1884.



WITNESSES:

Francis M.indle.

B. G. Underwood.

INVENTOR:

J. R. Fish.

BY

Munn & Co

ATTORNEYS.

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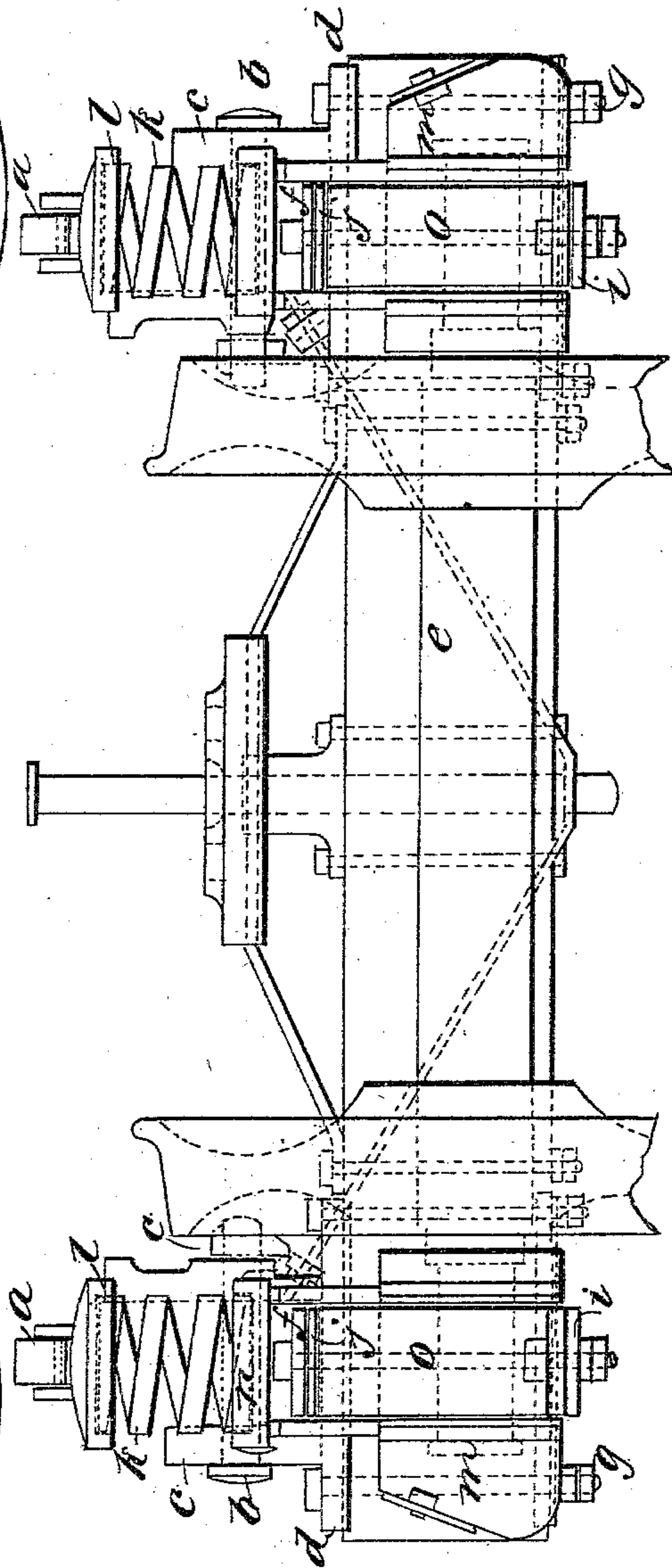
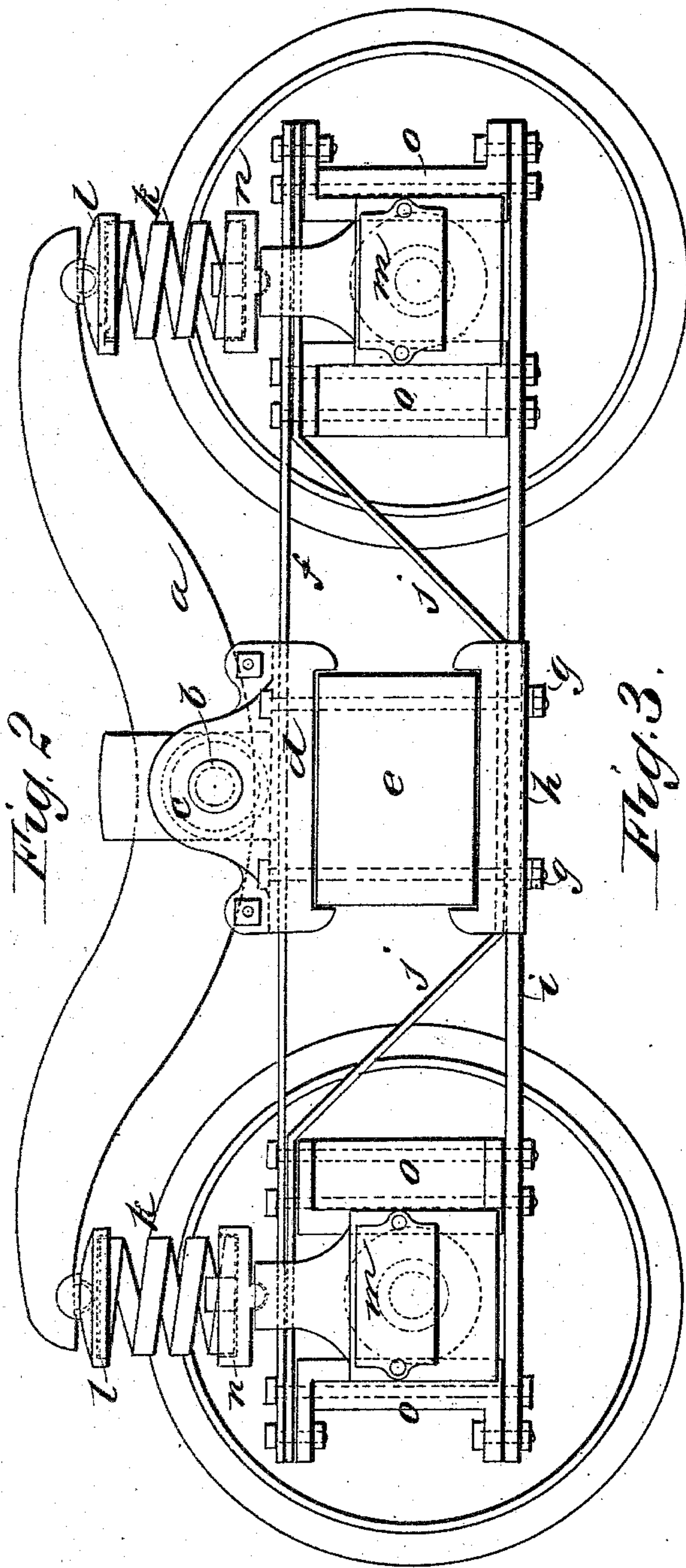
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UNITED STATES PATENT OFFICE.

JOHN R. FISH, OF GRAND RAPIDS, MICHIGAN.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 296,545, dated April 8, 1884.

Application filed August 11, 1883. (No model.)

To all whom it may concern:

Be it known that I, JOHN RANDOLPH FISH, of Grand Rapids, in the county of Kent and State of Michigan, have invented a new and Improved Car-Truck, of which the following is a full, clear, and exact description.

My invention consists of an improved arrangement of the equalizing-bars of railroad car and locomotive trucks, whereby the frames connecting the journal-boxes are entirely relieved of all the weight of the car and load, the said equalizing-bars being extended entirely over and resting on the springs of the axle-bearings, all as hereinafter fully described, and pointed out in the claims.

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

Figure 1 is a plan view of the truck in which the equalizing-bars are arranged according to my invention. Fig. 2 is a side elevation, and Fig. 3 is an end elevation.

The equalizing-bars *a* have a trunnion, *b*, at the center of each side, which are pivoted in the ears or boxes *c* of a cast-metal plate, *d*, firmly bolted on the top of the bolster *e*, said plate *d* having a groove across the top, in which the upper bar, *f*, of the journal-box frame rests, and is secured by the bolts *g*, which also secure the plate *h*, lower bar, *i*, and the diagonal bar *j* of the journal-box frame to the bolster, said lower plate, *h*, being also grooved across the face to receive the bars *i* and *j* of the frame. The equalizing-bars *a* extend over and rest on the springs *k* by caps *l*, said springs being located on the axle-bearings *m* by suitable cups, *n*. The boxes *m* are arranged between the jaws *o* of the journal-box frame in the usual manner. It will be seen that the weight of the car is transmitted through the equalizing-bars directly to the springs in this arrangement, and thus the frames for the journal-boxes are wholly relieved from the weight

of the load, the equalizers being made sufficiently strong to sustain the weight. This arrangement of equalizing-bars and springs can be applied either to a swing-beam or rigid center truck.

I do not abandon or dedicate to the public any patentable features set forth herein and not hereinafter claimed, but reserve the right to claim the same, either in a reissue of any patent that may be granted upon this application, or in other applications for Letters Patent that I may make.

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

1. In a car-truck, the combination, with a truck-frame and axle-bearings projecting above the same, of equalizing-bars pivoted at their centers to supports above the truck-frame, and extending longitudinally of the frame, with their ends projecting over the axle-bearings, and springs interposed between the projecting ends of the equalizing-bars and the axle-bearings, substantially as herein shown and described.

2. In a car-truck, the combination, with the truck-frame provided with the plate *d*, having ears *c* and the axle-bearings *m*, of the equalizing-bars *a*, pivoted between the ears of the said plate, and having their ends projecting over the axle-bearings, and the springs *k*, interposed between the equalizing-bars and axle-bearings, substantially as herein shown and described.

3. In a car-truck, the combination, with the truck-frame, the plates *d* *h*, and the bolster *e*, of the equalizing-bars *a*, pivoted to the plates *d*, the springs *k*, and the axle-bearings *m*, substantially as herein shown and described.

JOHN R. FISH.

Witnesses:

JOHN J. DE JONGE,
JOHN A. BOSSLER.