

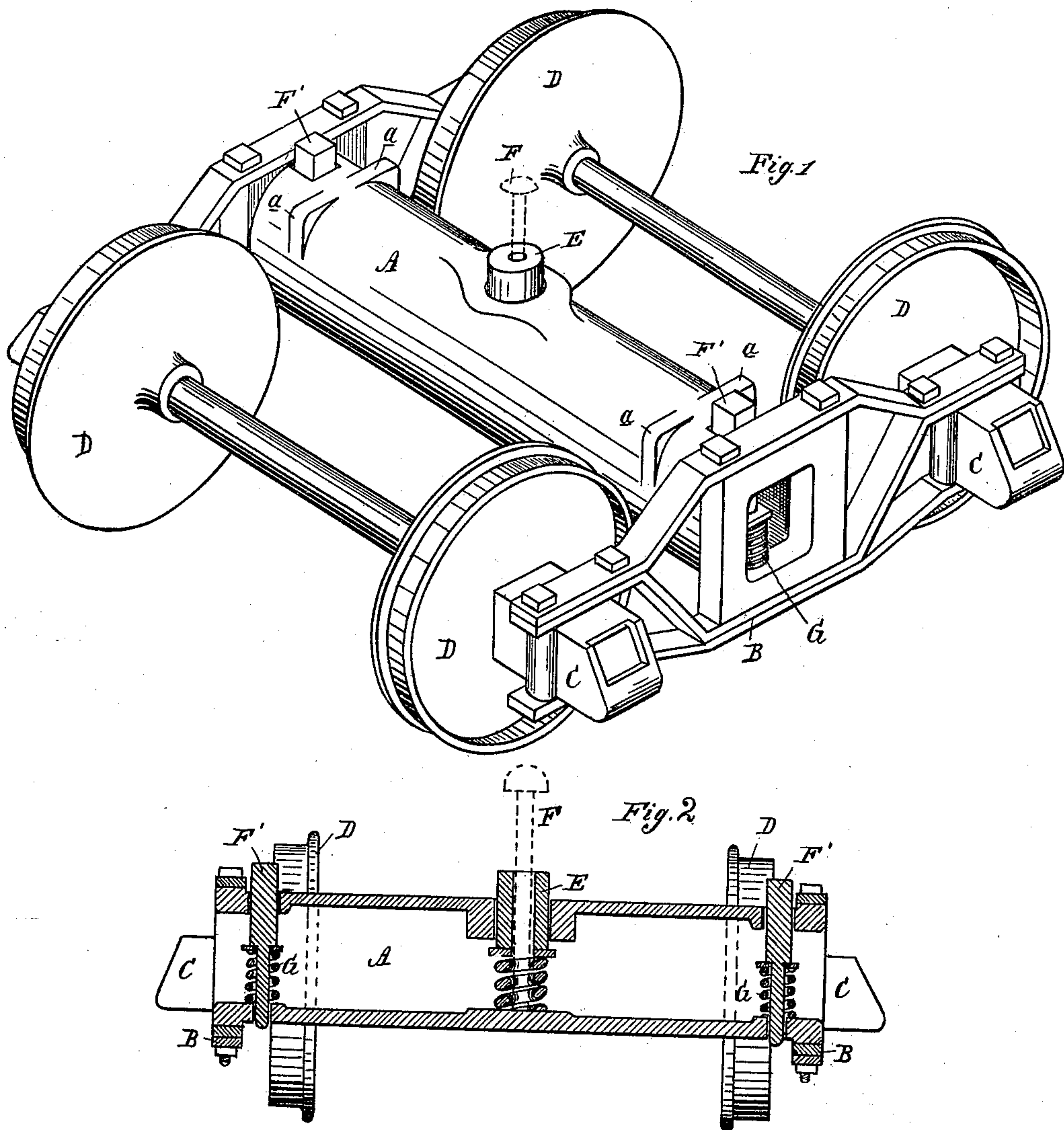
(No Model.)

J. TURNER.

CAR TRUCK.

No. 332,682.

Patented Dec. 15, 1885.



Attest:

John Schuman
[Signature]

Inventor:

John Turner.

by his Atty
[Signature]

UNITED STATES PATENT OFFICE.

JOHN TURNER, OF DETROIT, MICHIGAN.

CAR-TRUCK.

SPECIFICATION forming part of Letters Patent No. 332,682, dated December 15, 1885.

Application filed October 15, 1885. Serial No. 179,955. (No model.)

To all whom it may concern:

Be it known that I, JOHN TURNER, of Detroit, in the county of Wayne and State of Michigan, have invented new and useful Improvements in Railway-Car Trucks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to certain new and useful improvements in the construction of trucks especially adapted for freight purposes upon railway-tracks. Trucks for this purpose as ordinarily constructed are composed
15 of a large number of pieces, are very liable to get out of order, and great expenses are annually incurred in keeping them in repair; hence economical railroading seems to demand a rigid truck made of the fewest number of
20 pieces, so that the before-named objections may be avoided.

The invention consists in the peculiar construction of the various parts of the truck and their combination, as more fully hereinafter
25 described.

Figure 1 is a perspective view of my improved rigid car-truck. Fig. 2 is a vertical central longitudinal section through the truck-beam.

30 In the accompanying drawings, A represents the truck-beam, which is composed of a hollow metallic cylinder open at both ends, and of the proper length to suit the gage of the road upon which the truck is designed to run.
35 The ends of this cylinder are squared, as shown in the drawings, by means of proper flanges cast thereon or otherwise secured thereto, and adapted to receive the truss B, which latter embraces the squared end of the former
40 and carries the axle-boxes C, in which the axles and wheels D run. In the center, interior of this cylinder, there is secured in any convenient way a single coil-spring or a nest thereof, as may be desired. This spring or
45 these springs should be of sufficient strength to bear not only the weight of the car, but a larger proportion of its contents. Resting upon the top of this spring, (or these springs,) and projecting through an orifice of suitable

size in the top of the beam, is the pivot-block 50 E, the upper end of which is designed to engage with the usual socket-plate upon the bottom of a car-body; and F is the king-bolt, which passes through the floor of the car, the socket-plates, and the pivot-block. F' are 55 stud-bearings preferably, although not necessarily, rectangular in form, while their lower ends project into the interior of said beam, near each end thereof, and rest upon coil-springs G. These studs, with their springs 60 upon which they rest, are for the purpose of steadying the car against a rocking lateral motion, and also to assist in furnishing an elastic vertical bearing for the car-body when the same has been so loaded as to overcome 65 the resistance of the central spring or springs.

Ears *a* are cast integral with the beam or otherwise secured thereto, and afford means for securing the inside brakes in such position that they may be readily brought into 70 contact with the tread of the wheels.

It will readily be observed that by constructing the beam, as described, cylindrical in form, I obtain the greatest possible strength against all the strains to which such a beam 75 is subjected in the operation of the cars, and in the construction of the truck as a whole I reduce the number of pieces employed in such construction to the minimum, thereby reducing proportionately the cost of manufacture 80 and expense of repairs.

What I claim as my invention is—

1. In a railway-car truck, a hollow cylindrically-shaped beam, the ends of which are squared, as shown, in combination with trusses 85 which embrace and are rigidly secured to said squared ends and carry the axle-boxes, substantially as described.

2. In a car-truck, and in combination with a hollow cylindrical beam, a spring or nest of 90 springs located in the interior center of such beam, in combination with a pivot-block resting upon the top of such spring or springs, substantially as and for the purposes specified.

3. In a car-truck, a hollow cylindrically-shaped beam having secured to its ends the 95 necessary trusses, which carry the car-axle boxes, and having an interior central spring-

support carrying the pivot-block, in combination with bearing-studs projecting through the wall of said beam near each end and resting upon springs concealed within said beam,
5 substantially as and for the purposes set forth.

4. In a railway-car truck, a hollow cylindrical beam constructed substantially as described, and having ears cast upon either side

thereof or secured thereto for the purpose of supporting inside brakes, substantially as described. 10

JOHN TURNER.

Witnesses:

H. S. SPRAGUE,

E. SCULLY.