

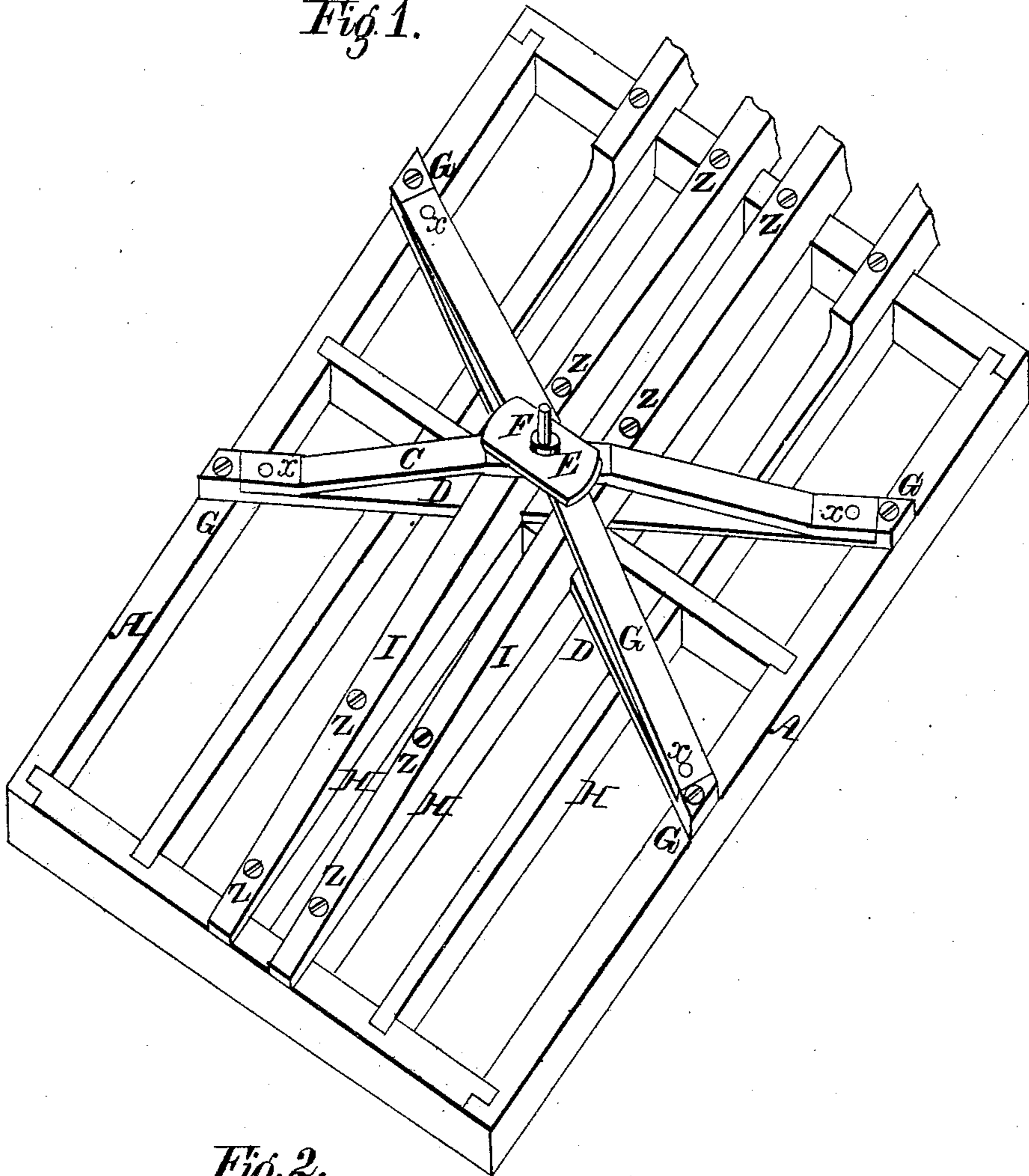
SNOW & ELMENDORF.

Car Truck.

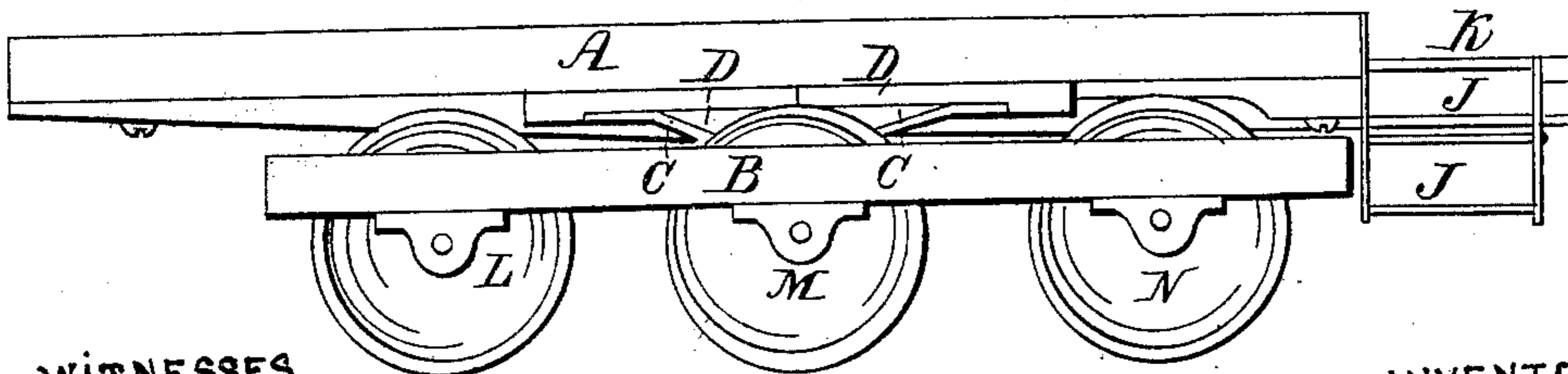
No. 90,403.

Patented May 25, 1869.

*Fig. 1.*



*Fig. 2.*



WITNESSES

*G. L. Chapin*  
*E. E. Gibson*

INVENTORS

*Wm B. Snow*  
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# United States Patent Office.

WILLIAM B. SNOW AND WILLIAM A. ELMENDORF, OF CHICAGO,  
ILLINOIS.

*Letters Patent No. 90,403, dated May 25, 1869.*

## TRUSS-ROCKER BEAM

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern:*

Be it known that we, WILLIAM B. SNOW and WILLIAM A. ELMENDORF, of Chicago, in the county of Cook, and State of Illinois, have invented an Improvement in Truss-Rocker Beams for Car-Trucks; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and letters marked thereon, making a part of this description, in which—

Figure 1 is a perspective representation of the bottom frame-work of a car, with our improved truss-rocker beam attached.

Figure 2, a longitudinal elevation of the same in position on the truck.

The nature of the present invention consists in the novel construction of a compound diagonal truss, or transom, which is so arranged that its centre part, bearing on the truck, can be placed further from the end of the car than when a simple transverse truss, or transom is employed, and at the same time fully support the end of the car-body without bringing the truck-wheel in the way of the stips, thereby allowing the use of longer trucks, which are necessary when heavy cars are to be properly supported.

In the construction of six-wheel trucks, our improvement is an important one, for there are no obstructions to the centre wheels, as the arms can be so placed relatively to each other, as to allow the wheels to come above the lower braces of the truss, and consequently reduce, very considerably, the height which the car-body ordinarily has above the track.

Another advantage consists in thoroughly bracing the body of the car with the same truss that supports its weight, and, at the same time, supporting it so far in the front and rear as to prevent the possibility of sagging in any particular place, when heavily loaded.

A A represent the longitudinal sills of so much of a car-body as is necessary to support one truck.

K represents one of the platforms, and

J J, the steps leading thereto; all of which have

the ordinary construction, and, therefore, need no particular description.

The truss, or transom consists of two strong iron bars D, figs. 1 and 2, which are placed diagonally with the sills A, and securely fastened to them at G G G G by strong bolts, as shown in fig. 1, and of iron braces C, which are placed under the bars D, and securely fastened, at their ends, to them by bolts z, as shown in same figure.

These bars and braces are securely fastened together at their respective intersections, either by a solid weld, or by bolts, as most convenient, and the braces are so formed at their central parts as to set flat on a centre-plate, E, which is used for the greater convenience of turning the car-body on the truck B.

H represents the stringers, or floor-timbers, placed above the bars D, and

I I represent the draught-timbers, placed between the bars D and braces C, and secured to the central stringers by bolts z z.

This arrangement for placing and securing the timbers is a very important one, and adds very materially to the strength of the car-frame, and to the convenience of construction.

Having thus described our invention,

What we claim, and desire to secure by Letters Patent of the United States, is—

1. A truss-rocker beam for car-trucks, consisting of the diagonal bars D D and braces C C, constructed and arranged to brace the sills of a car, and support its weight on the trucks, as and for the purpose specified and shown.

2. The combination of the truss D C, centre-plate E, sills A, and draught-timbers I I, as specified.

WM. B. SNOW.

WM. A. ELMENDORF.

Witnesses:

G. L. CHAPIN,

E. E. GIBSON.