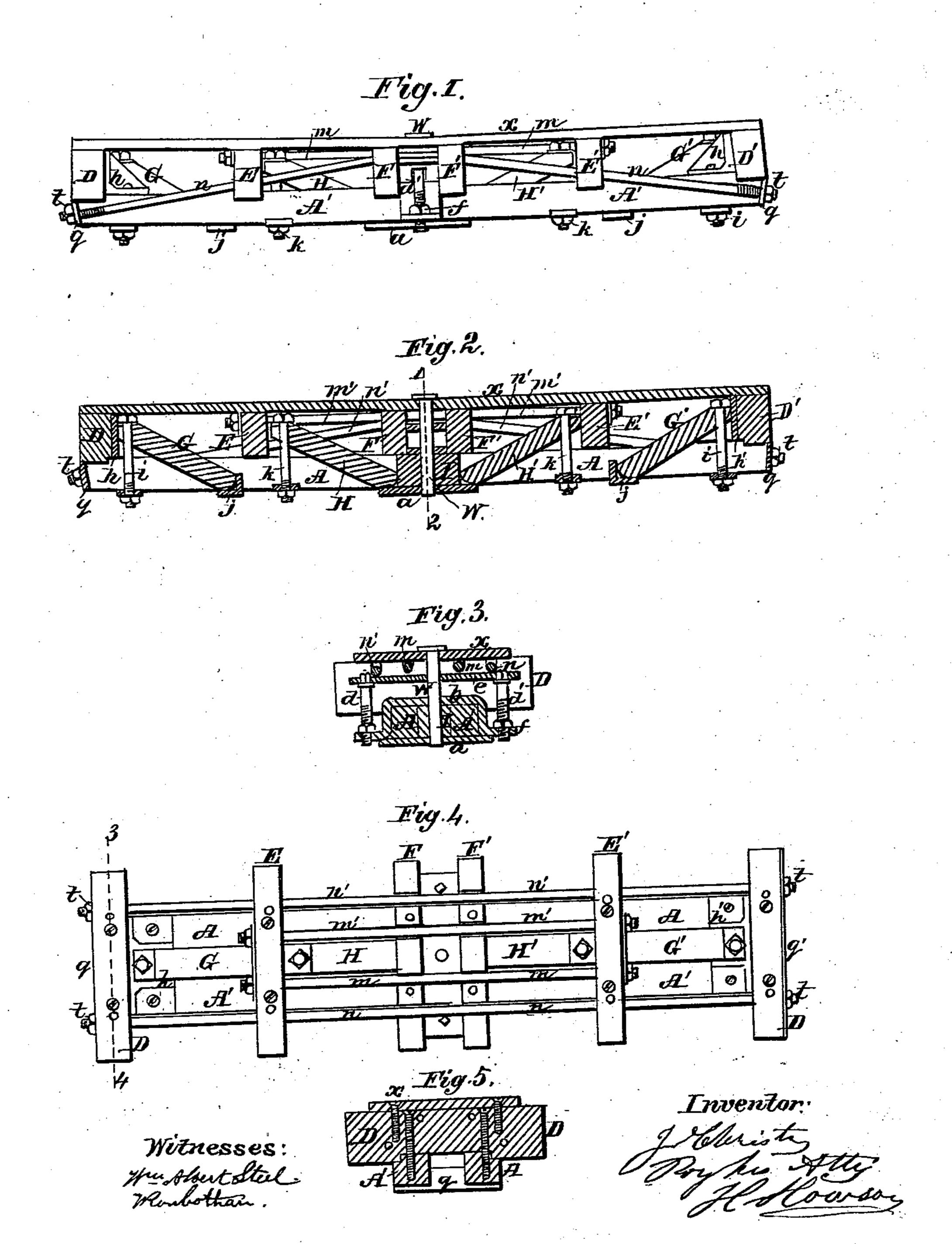
Patented Feb. 5, 1867.



Anited States Patent Pffice.

JAMES CHRISTY, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 61,713, dated February 5, 1867.

IMPROVED BOLSTER FOR RAILBOAD CARS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES CHRISTY, of Philadelphia, Pennsylvania, have invented an Improved Bolster for Railway Cars; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My improved bolster consists of certain longitudinal and transverse beams and stay rods, arranged and connected together substantially as described hereafter, so as to prevent sagging at the outer ends of the bolster, and so that these ends may be elevated at pleasure.

In order to enable others skilled in the art to make my invention, I will now proceed to describe the manner of constructing the same, reference being had to the accompanying drawing, in which-

Figure 1 is an exterior side view of my improved bolster for railway cars.

Figure 2, a vertical section.

Figure 3, a transverse section on the line 1-2, fig. 2.

Figure 4, a plan view; and

Figure 5, a transverse section on the line 3-4, fig. 4.

Similar letters refer to similar parts throughout the several views.

The improved bolster consists of the two longitudinal beams A and A', two end transverse beams D and D', intermediate transverse beams E and E', and F and F', and the diagonal braces G and G', and H and H'. The two longitudinal beams are connected together by the transverse beams above designated, and by the central beam I, and over the latter, and over the said beams A and A' passes a metal strap, b, and to the under side of the same beams is secured a plate, a. Two bolts, d and d', (fig. 3,) are fitted, one to each projecting end of the strap b, the upper square ends of the bolts passing through a plate e. Each bolt is provided with a nut, f, bearing on the strap b, by turning which nuts the plate e may be raised or lowered at pleasure. The upper end of each of the diagonal braces G and G' bears against a plate, h', and is secured to the beams A and A' by a bolt, i, the lower rounded end of each diagonal brace resting in a pocket, j, secured to the under side of the said longitudinal beams A and A'. In like manner the upper ends of the diagonal braces H and H' bear against the transverse beams E and E', the lower rounded ends of the said diagonal braces resting in corners formed by the central beam I and plate a, the diagonals being secured by bolts k to the longitudinal beams A and A'. The opposite transverse beams E and E' are connected together by horizontal bolts m and m', and the two stays n and \hat{n}' extend from end to end of the bolster, passing through plates q at the ends of the beams A and A', where they are furnished with nuts, t, the stays passing over and being supported in the middle by the adjustable plate e. W is the usual king-bolt, passing through the bottom x of the car, through the plate e, strap b, central beam I, and plate a. The sagging of the outer ends of the bolster-beams of railway cars so as to bear on the truck-frame is a matter of frequent annoyance and complaint, and interferes seriously with the free movement of the car body on the trucks. Should the outer ends of the above-described bolster be depressed, they can be readily elevated by turning the nuts tt of the stay-bolts n and n', or so adjusting the nuts f of the bolts d as to elevate the plate e, and the middle of the stay-bolts, the diagonal braces G and G', and H and H', readily accommodating themselves to this elevation of the outer ends of the bolster, and increasing the rigidity of the same. The outer ends of the bolster may also be elevated by tightening the nuts of the bolts k.

I claim as my invention, and desire to secure by Letters Patent-

1. The bolster composed of the within-described longitudinal and transverse beams, diagonal braces, and stay-rods, the whole being arranged and connected together substantially as and for the purpose herein set forth.

2. The combination of the strap b, adapted to the longitudinal and central beams, the adjustable bolts d and d', the plate e, and stay-rods n and n'.

3. The combination of the longitudinal and transverse beams, the adjustable or self-accommodating braces G G', and H H', rounded at the lower ends, and bolts i and k.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. JAS. CHRISTY.

Witnesses:

CHAS. E. FOSTER, W. J. R. DELANY.