

No. 640,691.

Patented Jan. 2, 1900.

R. W. OSWALD.
BODY BOLSTER FOR CARS.

(Application filed Mar. 6, 1899. Renewed Dec. 12, 1899.)

(No Model.)

Fig. 1.

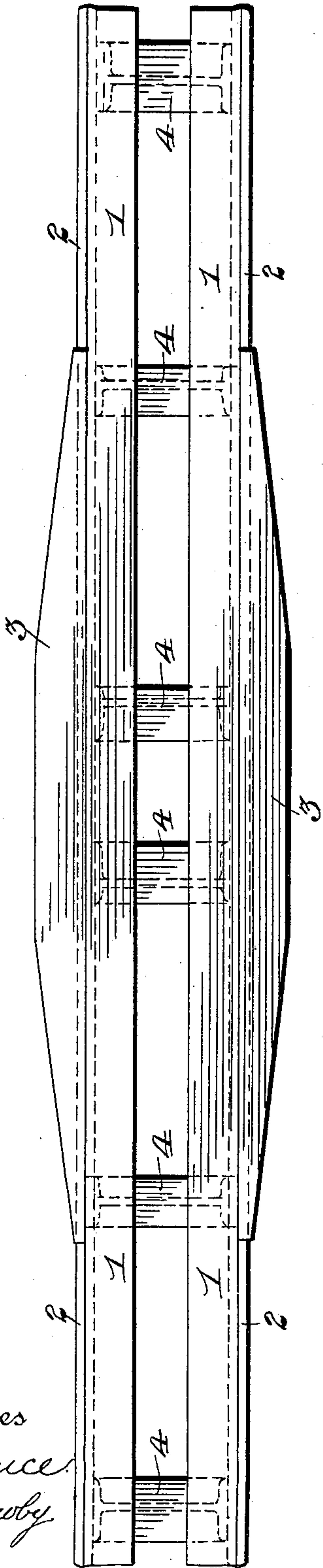
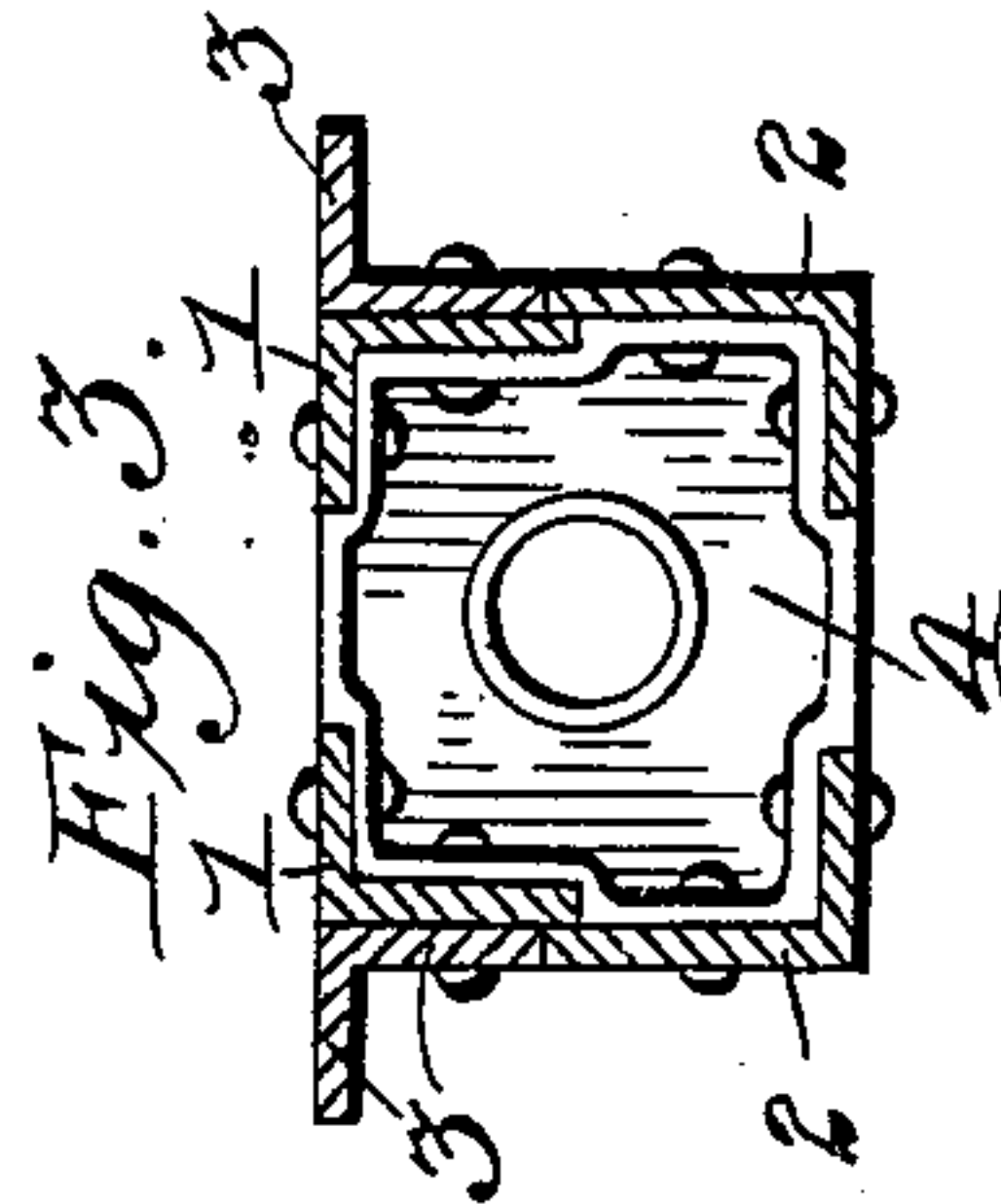
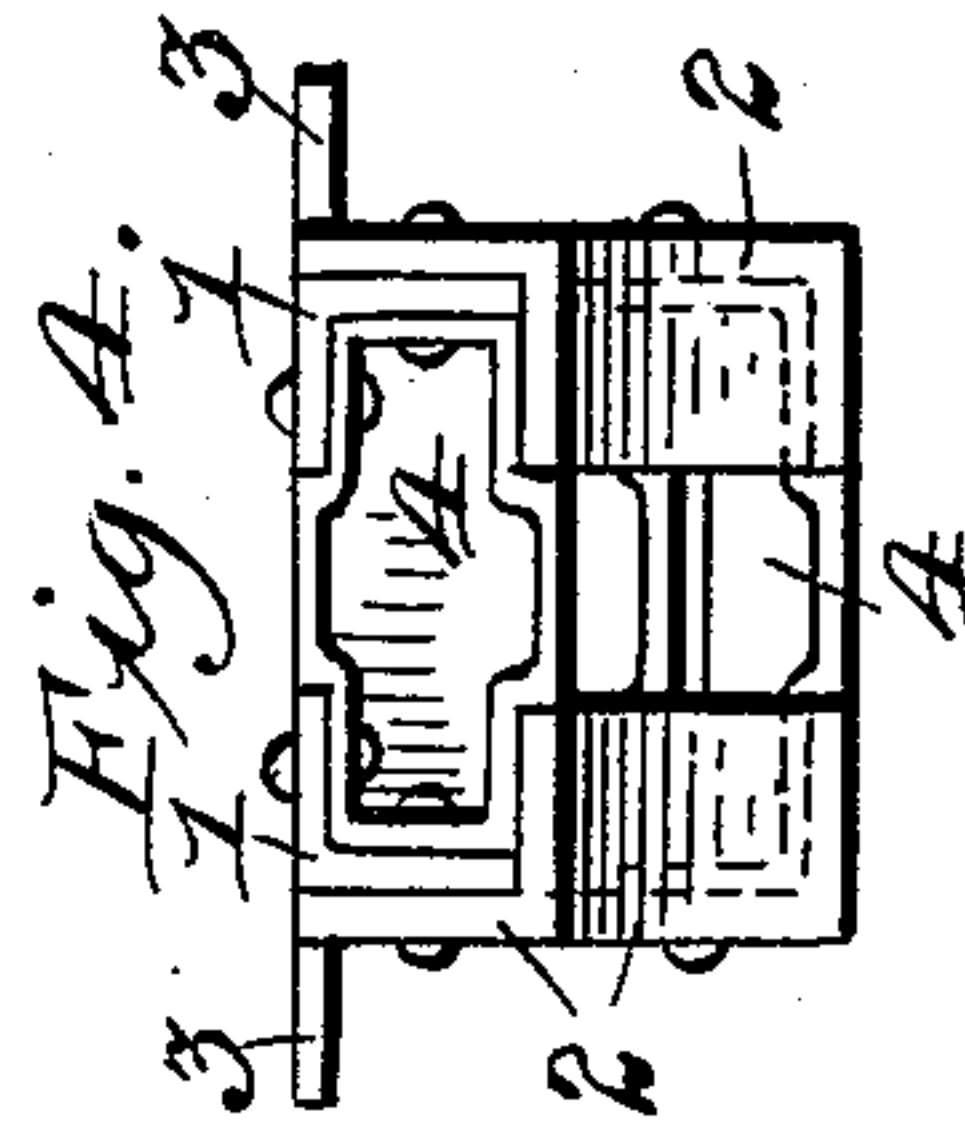
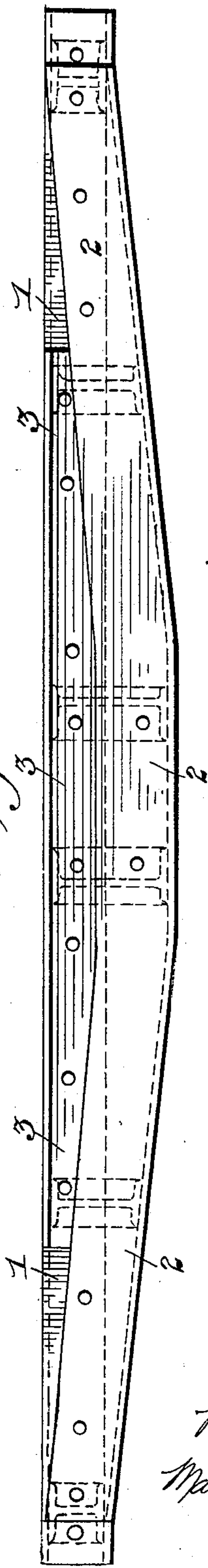


Fig. 2.



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UNITED STATES PATENT OFFICE.

RICHARD W. OSWALD, OF BLOOMSBURG, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO EDWARD B. TUSTIN, OF SAME PLACE.

BODY-BOLSTER FOR CARS.

SPECIFICATION forming part of Letters Patent No. 640,691, dated January 2, 1900.

Application filed March 6, 1899. Renewed December 12, 1899. Serial No. 740,110. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. OSWALD, a citizen of the United States, residing at Bloomsburg, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Body-Bolsters for Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in body-bolsters for cars, and particularly to bolsters which are constructed of angle irons and plates.

It consists in a body-bolster comprising upper and lower angle-beams, side angle brace-plates, and connecting-struts for holding the parts together.

It also consists in certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a top plan view of a body-bolster constructed in accordance with my invention. Fig. 2 represents a side elevation of the same. Fig. 3 represents an end elevation of the said bolster, and Fig. 4 represents a transverse cross-section through the central portion of the said bolster.

I find it desirable in producing bolsters for cars to construct them of angle-bars suitably arranged and secured together to form rigid and strong structures and to so brace the same laterally and vertically that they shall be capable of withstanding any strains which may be placed upon them. For this purpose I preferably form my improved body-bolster of upper and lower angle-beams, as 1 and 2, the said angle-beams being preferably arranged in pairs to form the opposite sides of the bolster. The vertical flanges of the upper and lower beams 1 and 2 are placed together, the ends of the said beams being bolted or riveted to secure them together, while the horizontal flanges of the said angle-irons extend toward each other, as clearly seen in Figs. 3 and 4 of the drawings. In order to thoroughly brace the upper and lower angle-bars 1 and 2 with respect to each other and

at the same time to form a broad bearing-surface to receive the body of the car, I strengthen the angle-bars by means of side angle-plates, as 3 3, having their vertical flanges applied against the vertical flanges of the upper beams 1, the lower edges of the said flanges being cut to fit the upper edges of the lower angle-beams 2. The upper flanges of the angle-plates 3 are brought flush with the upper flanges of the angle-beam 1, thereby forming a broad upper bearing-surface for the bolster. As seen in Fig. 1 of the drawings, these upper flanges of the angle-plates 3 are preferably tapered toward the ends of said plates. The upper angle-beams 1 are preferably made straight from end to end, while the lower angle-beams are depressed centrally, as seen in Fig. 2, and it is this central depressed portion of the said angle-beams that the side bracing angle-plates fit upon. Suitable connecting-struts or brace-plates, as 4 4, are interposed between the sides of the bolster, at intervals along the length thereof, as will be seen by reference to the drawings. These struts are preferably formed of single pieces of metal having bolting-flanges, as 5, which are riveted or otherwise secured to the upper and lower angle-beams. These brace-plates 4 are constructed of such a contour as to exactly fit the inner surface of the said angle-beams forming the sides of the bolster, as will clearly appear by reference to Figs. 3 and 4 of the drawings.

It will be evident that by using the angle-irons and the angle brace-plates as above described a body-bolster for cars can be produced which is strong and rigid and yet which is inexpensive, particularly for the reason that it may be made of merchantable material and does not require a great deal of preparation for the purpose.

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

1. A body-bolster comprising sides formed of upper and lower angle-beams, having their horizontal flanges extending inwardly toward each other, the lower angle-beams being depressed centrally and angle brace-plates arranged on the opposite side of the bolster outside the upper angle-beams and adapted to fit

and rest upon the upper edges of the lower angle-beams, the horizontal flanges of the said brace-plates extending outwardly from the bolster and being flush with the horizontal
5 flanges of the upper beams to form therewith a broad bearing-surface, and struts for strengthening the parts, substantially as described.

2. A body-bolster for cars comprising sides
10 formed of upper and lower angle-beams having their vertical flanges placed together and their horizontal flanges extending toward each other, the lower angle-beams being depressed centrally, side angle brace-plates having
15 their vertical flanges applied to the vertical flanges of the upper beams and cut so as to fit the upper edges of the lower beams, the horizontal flanges of the said upper plates being flush with the top of the bolster to present a broad bearing-surface, and struts or
20 cross-braces for joining the sides of the bolster, substantially as described.

3. A bolster for cars, comprising sides formed of upper and lower angle-beams hav-

ing their vertical flanges applied together and
25 their inner flanges extending toward each other, said lower beams being depressed centrally, side angle brace-plates having their vertical flanges applied against the vertical
30 flanges of the upper beams, the lower edges of the said vertical flanges being cut to fit the upper edges of the vertical flanges of the lower beams, and the horizontal flanges of the
35 said brace-plates extending outwardly and lying flush with the top of the bolster, the said flanges being tapered toward the ends of the bolster and struts or braces interposed between the sides of the bolster and fitting the
40 inner contours thereof, all the parts being securely riveted together, substantially as described.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

RICHARD W. OSWALD.

Witnesses:

S. F. PEACOCK,

JOHN H. HARMAN.