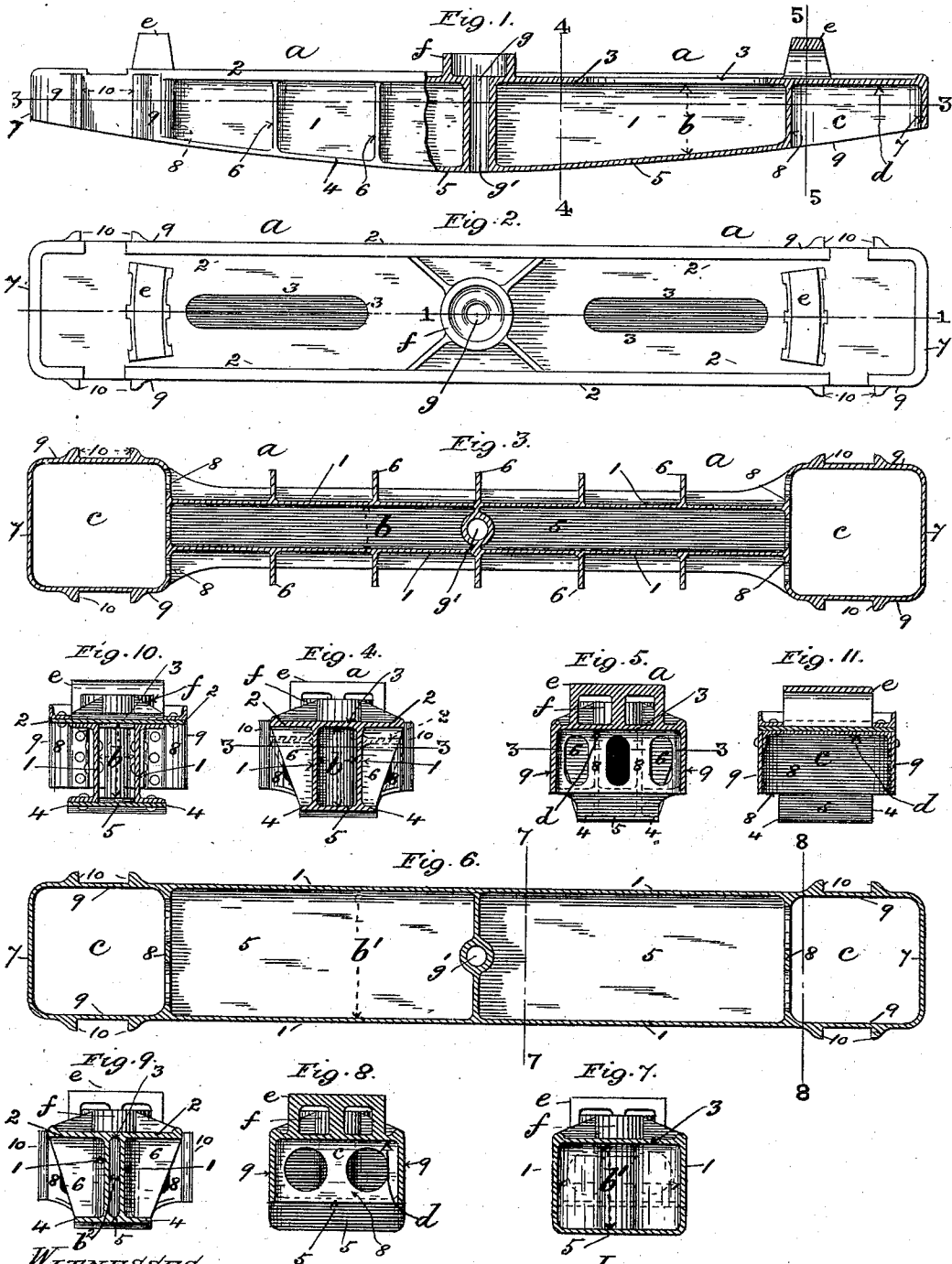


(No Model.)

E. F. GOLTRA.
CAR TRUCK BOLSTER.

No. 545,792.

Patented Sept. 3, 1895.



WITNESSES

Geo. Pray
H. C. Cotton

INVENTOR

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UNITED STATES PATENT OFFICE.

EDWARD F. GOLTRA, OF ST. LOUIS, MISSOURI, ASSIGNOR TO THE AMERICAN STEEL BOLSTER COMPANY, OF MADISON COUNTY, ILLINOIS.

CAR-TRUCK BOLSTER.

SPECIFICATION forming part of Letters Patent No. 545,792, dated September 3, 1895.

Application filed June 14, 1895. Serial No. 552,795. (No model.)

To all whom it may concern:

Be it known that I, EDWARD F. GOLTRA, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Improvement in Car-Truck Bolsters, of which the following is a specification.

This invention relates to car-truck bolsters, and has for its object to provide a strong, compact, and durable bolster, which by the improved arrangement of its parts is capable of sustaining injury or partial fracture without collapse.

The invention consists in features of novelty, as hereinafter described and claimed, reference being had to the accompanying drawings, forming part of this specification, whereon—

Figure 1 is a side view of the improved bolster, taken partly in section on line 1 1 in Fig. 2; Fig. 2, a plan of the bolster; Fig. 3, a horizontal section thereof, taken on line 3 3 in Figs. 1, 4, and 5; Figs. 4 and 5, transverse sections on lines 4 4 and 5 5, respectively, in Fig. 1; Fig. 6, a corresponding view to Fig. 3, showing a modification of the bolster; Figs. 7 and 8, transverse sections thereof, taken on lines 7 7 and 8 8, respectively, in Fig. 6; Fig. 9, a corresponding section to Fig. 4, showing a further modification of the bolster; and Figs. 10 and 11, corresponding sections to Figs. 4 and 5, showing the parts of the bolster separately constructed and interjoined, like letters and numerals of reference denoting like parts in all the figures.

Referring to Figs. 1, 2, 3, 4, and 5, *a* represents the improved bolster, which may be made of pressed or cast metal integral throughout, as shown, or of other suitable material in separate parts, built up and fastened together, as hereinafter more particularly referred to. The main part of the bolster *a* consists of a longitudinally-arranged box-girder *b*, which may be of any desired width or distance between its side webs 1 1. When of less width than that of the bolster top, as shown, the side webs 1 1 of the box-girder *b* are formed or provided externally with upper longitudinal flanges 2 2, respectively, which are preferably flush with the top web 3 of the box-girder *b* and form therewith the top of the bolster *a*; or the

flanges 2 2 may be below the top web 3, if desired, and the configuration of the bolster top conformed thereto, as indicated by dotted lines in Fig. 4. The side webs 1 1 are also preferably provided with lower external longitudinal flanges 4 4, which are shown flush with the bottom web 5 of the box-girder *b*, but may be otherwise located with respect thereto; or the lower flanges 4 4 may be dispensed with. Stiffening-brackets 6 are provided between the flanges 2 4 and side webs 1 1, as shown, or otherwise arranged.

Opening into the bolster *a*, on its under side, between each end 7 thereof and the corresponding flanged end 8 or outwardly-directed side webs 1 1 of the box-girder *b*, is a recessed space *c*, having connecting side walls 9 between the ends 7 and 8 and containing the usual spring-seats *d*, which are preferably level with the under side of the top of the bolster *a*, as shown, but may be arranged at a different level, if desired. On the side walls 9 of the spaces *c* are the usual column-guides 10. The top of the bolster *a* is formed or provided with the side bearings *e* and with the center bearing *f*, having its opening *g* coincident with a vertical opening or central perforation *g'* through the box-girder *b* for receiving the king-bolt.

In the modification shown by Figs. 6, 7, and 8 the box-girder *b'* is of the same width as the bolster top or top web 3 of the girder *b'*, in which case the flanges 2 2 and 4 4 and the brackets 6, before described, are not requisite.

In the modification shown by Fig. 9 the side webs 1 1 of the box-girder *b²* are arranged in juxtaposition along the middle of the bolster, the other parts of which are similar to the corresponding parts before described.

In Figs. 10 and 11 the side webs 1 1, top web 3, and bottom web 5, composing the box-girder *b*, with the flanges or lateral extensions 2 4 of the top and bottom webs 3 5, respectively, as also the other component parts of the bolster, which are analogous to the corresponding parts before described, are of separate construction, built up and secured together by L-irons and rivets, bolts, or otherwise for forming a complete bolster.

By this invention, if one of the side webs of the box-girder becomes injured or broken the

stability of the bolster will be maintained by the other side web.

I claim as my invention—

- 5 1. A car-truck bolster having a longitudinally arranged box-girder perforated centrally and flanged along its side webs, at the top or thereabout, the said bolster having spring seats and provided with center and side bearings, substantially as described.
- 10 2. A car-truck bolster having a longitudinally arranged box-girder flanged along its side webs, at the top and bottom, or there-

about, respectively, the said bolster having spring seats and provided with center and side bearings, substantially as described. 15

3. A car-truck bolster having a longitudinally arranged box-girder flanged and provided with stiffening brackets, the said bolster having spring seats and carrying center and side bearings, substantially as described. 20

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Witnesses:

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