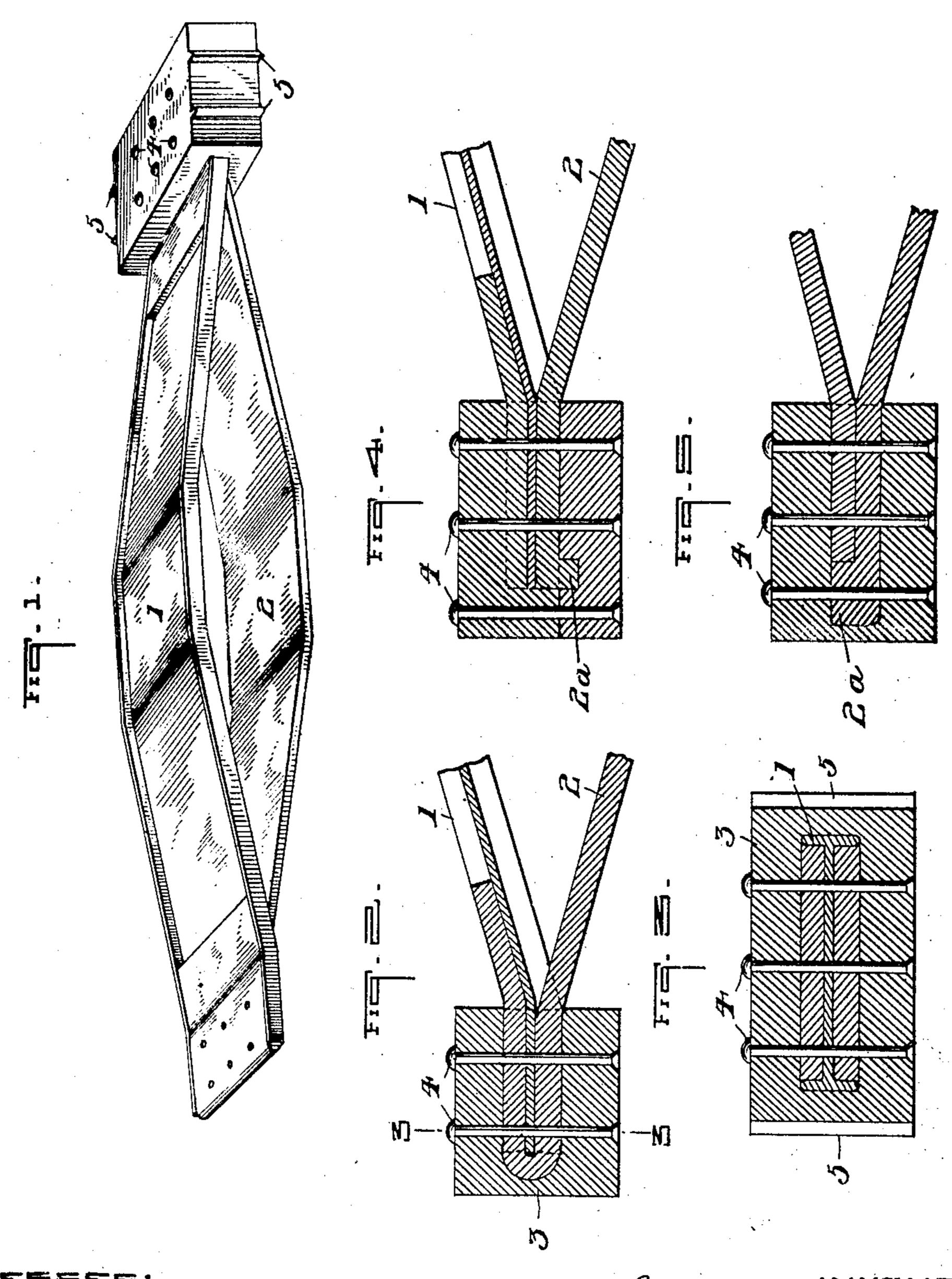
## O. S. PULLIAM. BOLSTER. APPLICATION FILED FEB. 9, 1907.



## UNITED STATES PATENT OFFICE.

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BOLSTER.

No. 869,651.

Specification of Letters Patent.

Patented Oct. 29, 1907.

Application filed February 9, 1907. Serial No. 356.563.

To all whom it may concern:

Be it known that I, Oswald S. Pulliam, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Bolsters, of which the following is a specification.

The prime object of my invention is to provide new and improved means for uniting the ends of the compression and tension-members of a metallic car-bolster whereby most of the strains occurring in practice at the ends of said members are taken care of by strong end-members or castings instead of the rivets usually employed for this purpose.

To this end the present invention consists of a new and improved car bolster, in the novel features of construction, and in the combination of parts all as fully hereinafter described and claimed.

In the accompanying drawing, which illustrates applications of my invention, Figure 1 is a perspective view of a car-truck bolster constructed in accordance with my invention; Fig. 2 a detail sectional view particularly showing one form of means for uniting the ends of the compression and tension-members; Fig. 3 a sectional view taken on line 3—3 of Fig. 2; and Figs. 4 and 5 detail sectional views showing modified forms of my invention.

Referring to the drawing, as illustrated and as preferred, the compression-member 1 is in the form of an I-beam and the tension-member 2 formed of a bent plate.

In the form of Fig. 1 the ends of the tension-member are bent up and overlap the ends of the compression-member. My invention, however, is not limited to this construction for the meeting ends of the compression and tension-members may be of the forms shown by Figs. 4 and 5.

In the form of Fig. 4 the ends of the tension-member are turned down to form engaging-flanges 2<sup>a</sup> and in the form of Fig. 5 the ends are turned up to form similar flanges.

The means for uniting the respective ends of the compression and tension-members comprise a comparatively heavy end-member or casting 3 made either as an integral box like structure having an opening to receive the ends of both the compression and tension-members as shown by Figs. 2 and 5, or made in two parts as shown by Fig. 4. In addition to the end members the uniting means as shown comprise a plurality of rivets 4 designed to be passed through the end-

members as well as the meeting ends of the compres- 50 sion and tension-members. The respective end-members are each designed to overlap and clasp the ends of both the compression and tension-members.

Column-guides 5 are formed on the ends of the endmembers as particularly shown by Fig. 1. The ends 55 of the respective compression and tension-members are securely clamped within the end-members and said end-members sustain the heavy or main strains of both the compression and tension-members while the rivets sustain comparatively little strain. 60

If desired the end-members or castings may be cast on the ends of the compression and tension-members instead of forming the end-members separately and then uniting them by means of the rivets.

What I claim is:

1. A bolster comprising a compression-member and a tension-member having their respective ends in contact with one another, and comparatively heavy end-members overlapping and adapted to receive the contacting ends of both the compression and tension-members and to sustain 70 the main strains of both of the latter members.

2. A bolster comprising a compression - member, a tension-member, and means for uniting the ends of sald members comprising overlapping end-members in which the respective ends of both the compression and tension-members 75 meet and rivets passed through the ends of the compression and tension-members and the respective end-members.

3. A bolster comprising a compression member, a tension-member, and means for joining the respective ends of said members comprising a casting overlapping the ends 80 of the compression and tension-members said casting and ends rigidly joined by rivets passed through the casting and the ends of the said members.

4. A bolster comprising a compression-member of I-beam form, a tension-member having its ends bent up over the ends of the compression-member, means for uniting the ends of said members and sustaining the heavy strains of said members comprising a comparatively heavy casting in which the ends of said members are located, and rivets passed through the casting and ends of the compression 90 and tension-members.

5. A bolster comprising a compression-member, a tension-member formed with end engaging-flanges said members having their respective ends in contact with one another, and comparatively heavy end-members overlapping the contacting ends of both members and provided with means for engaging the flanged ends of the tension-member.

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

OSWALD S. PULLIAM.

Witnesses:

MARGARET HUGHES, W. G. DOOLITTLE.