

No. 852,892.

PATENTED APR. 30, 1907.

A. LIPSCHUTZ.

BOLSTER.

APPLICATION FILED NOV. 22, 1906.

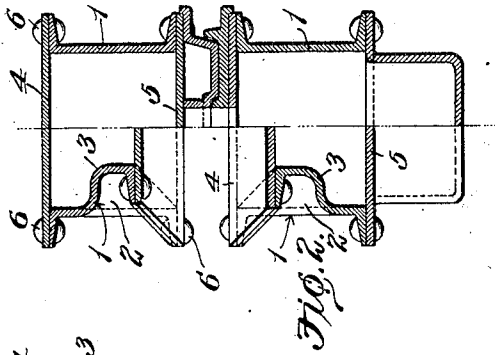


Fig. 2.

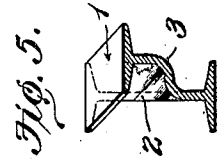


Fig. 5.

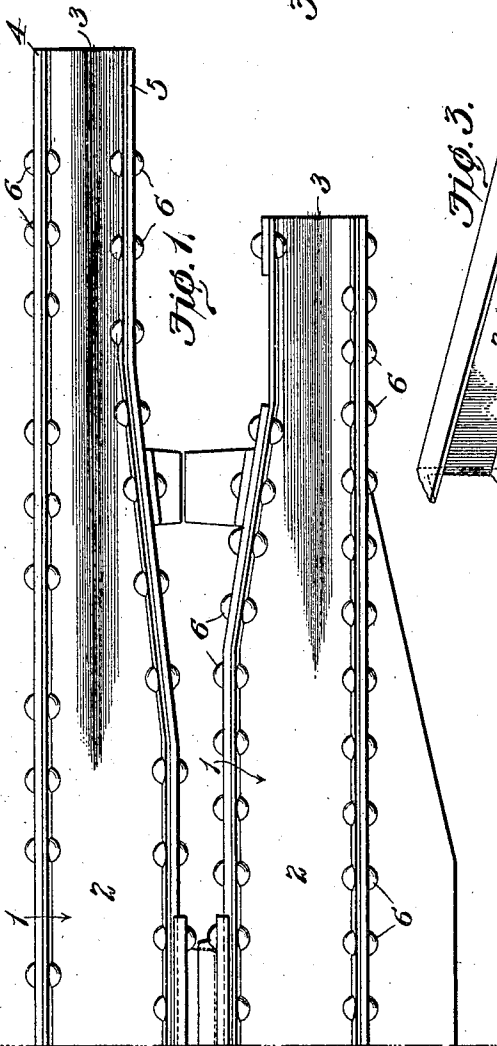


Fig. 1.

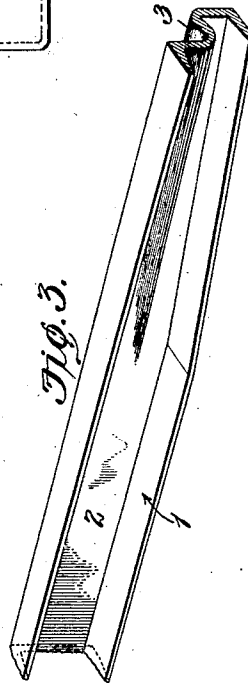


Fig. 3.

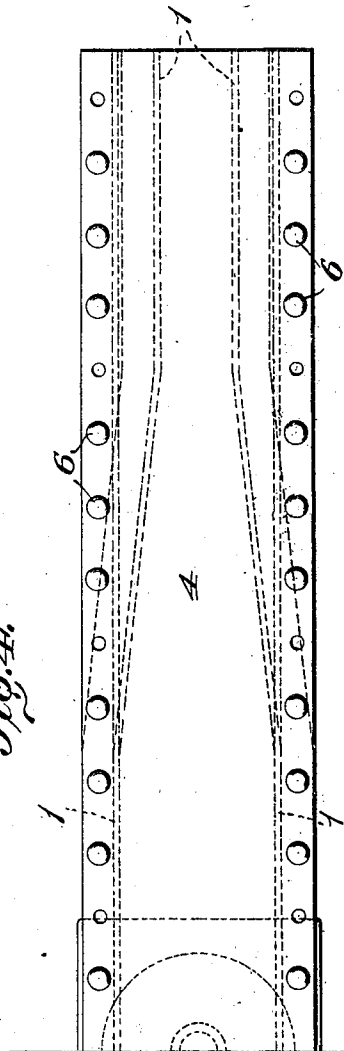


Fig. 4.

Witnesses:  
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Arthur Lipschutz.  
By Arkewell & Cornwall Attys.

# UNITED STATES PATENT OFFICE.

ARTHUR LIPSCHUTZ, OF CHICAGO, ILLINOIS.

## BOLSTER.

No. 852,392.

Specification of Letters Patent.

Patented April 30, 1907.

Application filed November 22, 1906. Serial No. 344,602.

*To all whom it may concern:*

Be it known that I, ARTHUR LIPSCHUTZ, a citizen of the United States, residing at Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Bolsters, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1, is a side elevation of a body bolster, and truck bolster, embodying the features of my invention; Fig. 2 is a cross sectional view of the bolsters shown in Fig. 1; the right-hand side of said figure being taken at approximately the centers of the bolsters, and the left-hand side being taken adjacent to the ends of the bolsters; Fig. 3 is a detail perspective view of one of the side members of the bolster; Fig. 4 is a top plan view of the body bolster; and Fig. 5 is a cross-sectional view of a side member of I-shape in cross section.

This invention relates to bolsters for railway rolling stock and particularly to that type which are substantially box-shape in cross section, and vary in depth from their centers toward their opposite ends.

The object of my invention is to provide a bolster which can be manufactured at a small cost and which will be strong enough to stand the strains to which it is subjected. To this end, I use two parallel flanged members to form the side walls of the bolster and bend the webs of the end portions of each of said members so that the upper and lower flanges thereof will be closer together at the end portions of the bolster than at the central portion, said flanged members being connected together in any suitable manner, so that an approximately box-shaped bolster is produced which varies in depth from its center toward its opposite ends. This same construction is applicable to body bolsters and truck bolsters, and in the drawings which represent the preferred form of my invention, both forms of bolsters are shown.

Referring to the drawings, 1 designates parallel flanged members which may be either rolled or of pressed metal and either of channel form or I-shape or Z-shape in cross section.

In the bolsters shown in Fig. 1, the flanged members 1 are of channel form and the webs

2 of said members at the end portions of the bolster are bent at 3 so that the upper and lower flanges of said members will lie closer together at the end portions of the bolster than at the central portion thereof. It is immaterial in just what form or shape the webs of the members 1 are bent so long as the upper and lower flanges are brought closer together at the end portions of the bolster than at the center, but I have herein shown said webs as provided with substantially angular bends 3.

The two parallel members 1 may be connected together in any suitable manner but I prefer to use top and bottom plates 4 and 5 which are fastened to the upper and lower flanges of said members by rivets 6.

In a body bolster in which the webs of the parallel members 1 are provided with a gradual right angle bend as shown in Figs. 1 & 2, the underneath half of the end portions of the bolster will be of less width than the upper half thereof so that the end portions of the bottom plate 5, will be formed tapering.

In Fig. 5 I have shown the form in which I bend an I-beam when flanged members of this shape in cross section are used in place of channels.

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

1. A bolster consisting of parallel flanged members having their webs bent at the end portions of the bolster so as to bring their upper and lower flanges closer together but in different vertical planes, and means for fastening said members together; substantially as described.

2. A bolster in which the sides are composed of flanged members that have their webs bent so that the end portions of the bolster will be of less depth than the central portion thereof and the flanges of said members will be in different vertical planes; substantially as described.

3. A bolster consisting of two parallel flanged members connected together, the webs of said members being bent out of their normal planes to produce a bolster which varies in depth from its center toward its opposite ends, the flanges of said members lying in different vertical planes; substantially as described.

4. A bolster comprising parallel flanged members, the webs of which are bent out of

their normal planes at the end portions of the  
bolster, thereby causing the flanges of said  
members to lie in different vertical planes,  
and top and bottom plates connected to the  
5 flanges of said members; substantially as de-  
scribed.

In testimony whereof I hereunto affix my

signature in the presence of two witnesses,  
this 18th day of October 1906.

ARTHUR LIPSCHUTZ.

Witnesses:

ANNA F. WAIT,  
M. F. HUNTOON.