

No. 748,332.

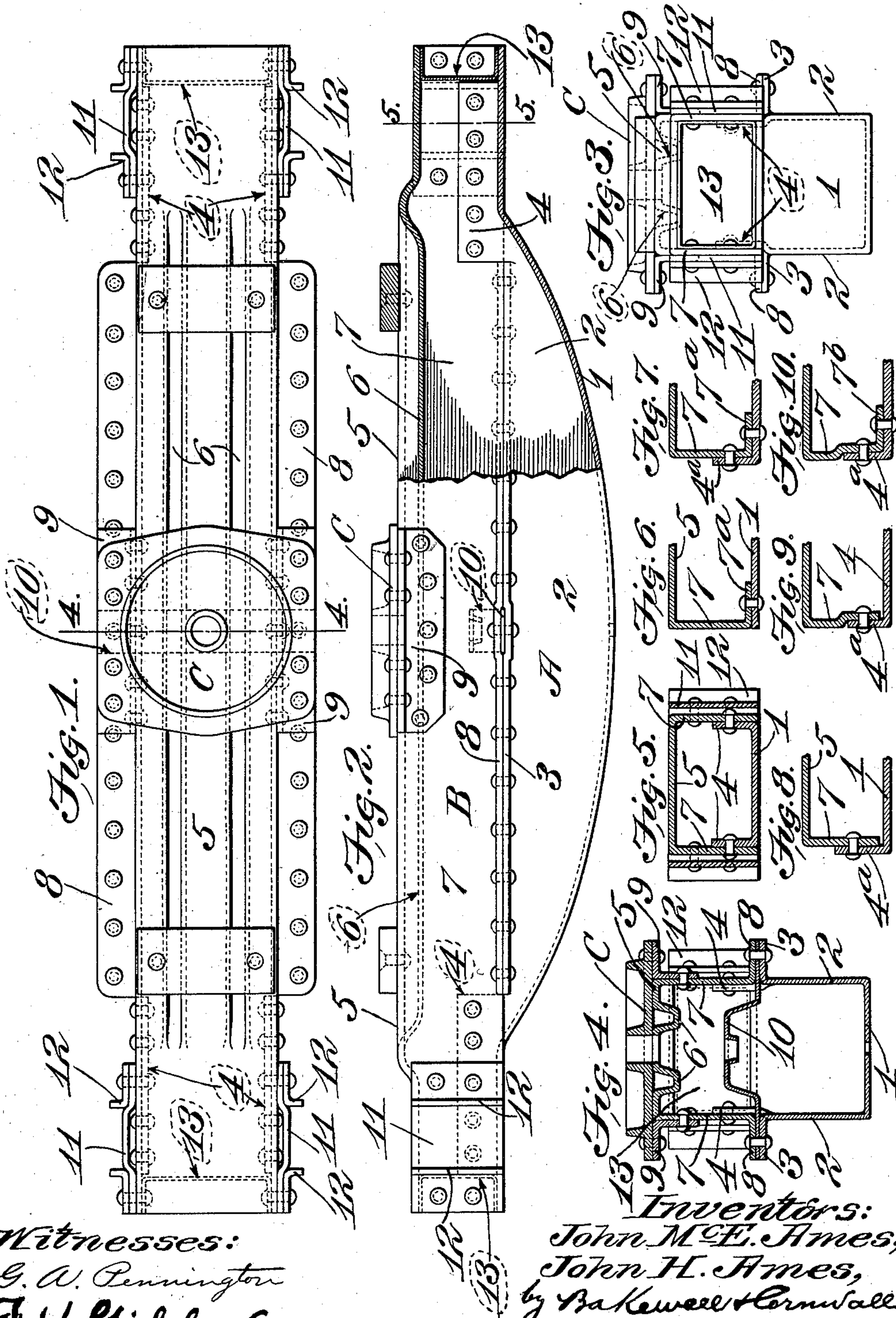
PATENTED DEC. 29, 1903.

J. McE. & J. H. AMES.

BOLSTER.

APPLICATION FILED AUG. 27, 1903.

NO MODEL.



Witnesses:

G. A. Pennington

J. H. Gibbs

Inventors:
John McE. Ames,
John H. Ames,
by Baker & Cornwall
Attys.

UNITED STATES PATENT OFFICE.

JOHN MCE. AMES, OF NEW YORK, AND JOHN H. AMES, OF STAPLETON,
NEW YORK, ASSIGNORS TO BENJAMIN A. HEGEMAN, JR., OF NEW
YORK, N. Y.

BOLSTER.

SPECIFICATION forming part of Letters Patent No. 748,332, dated December 29, 1903.

Application filed August 27, 1903. Serial No. 170,976. (No model.)

To all whom it may concern:

Be it known that we, JOHN MCE. AMES, residing at New York, and JOHN H. AMES, residing at Stapleton, State of New York, citizens of the United States, 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 a part of this specification, in which—

Figure 1 is a top plan view of the improved bolster. Fig. 2 is a side elevational view partly broken away. Fig. 3 is an end elevational view. Fig. 4 is a section on line 4 4 of Fig. 1. Fig. 5 is a sectional view on line 5 5 of Fig. 2. Figs. 6, 7, 8, 9, and 10 are detail views showing modifications of the end portion of the bolster.

This invention relates to new and useful improvements in pressed metallic bolsters wherein a plurality of superimposed trough-shaped members formed of pressed sheet metal are united to form a bolster united by means of rivets, which for the greater part are so applied that the riveting may be done from the outside, with the exception of joining the top and bottom members at the end portions, where the rivets are readily accessible and may be easily reached through the open ends. Another feature of advantage is that the bottom members may be made from one uniform die and variations in heights of different bolsters be regulated by varying the vertical depth of the top member.

Cast-metal parts, which are liable to break, are practically eliminated, the only casting used with this bolster being the center plate, though, if desired, a pressed-steel shape may be substituted therefor.

Referring to the drawings, A is the bottom member, which is substantially trough-shaped, being composed of a bottom wall 1, which may be curved or formed as a double inclined wall. 2 represents the vertical walls, which at the center of the bolster extend laterally to provide attaching-flanges 3, while at the ends said walls extend up from the attaching-flanges 4.

The flanges 3 are shown as integral with the vertical walls 2, though it is obvious that, if desired, they may consist of angles riveted thereto and perform the same function. Said flanges extend from the middle of the lowest portion to the point where the vertical extensions 4 commence, said flanges 4 extending thence to near the end of the bolster, as best shown in Fig. 2 in full lines.

Coöperating with the lower member A is a superimposed member B, which may vary in depth to accommodate different-sized bolsters. The member B is, like A, a pressed-metal part having the top face 5, which may, if desired, be provided with corrugations in the form of longitudinally-disposed parallel ribs 6, projecting inwardly to reinforce the same, or said web portion may be in a plain surface.

Projecting downwardly from the web portion 5 are walls 7, having thereon laterally-extending flanges 8, the flanges 8 being co-extensive with the flanges 3, before referred to, and, like said flanges, may be formed of angles riveted to said vertical flanges, if desired, though the integral flanges are preferred.

It will be noted that the flanges 3 and 8 are united by means of rivets passing vertically therethrough.

Before the parts A and B are united there are angles 9, secured to the walls 7 by rivets passing through the same, and the laterally-projecting legs of said angles lie substantially flush with the web portion 5 of said upper member B, whereby there is provided a wide bearing-surface for the center-plate C.

The part 10 is a lower center-pin support, which may be arched and perforated, as best shown in Fig. 4, or may be a straight piece of metal, according to the length of the center pin to be used with the bolster. This pin-socket is secured in position, as shown in Figs. 2 and 4, by means of the rivets uniting the flanges 3 and 8, which pass therethrough and through the perforated end portions of said pin-socket member 10. The flanges 3 and 8 may be bent to accommodate this pin-socket, as shown.

The flanges 4 at the ends of the bolster lie

preferably within and substantially parallel with the end portions of the walls 7, and said overlapping portions are united by means of rivets, though, as shown in Fig. 6, the flanges 4 may be omitted and the inwardly-extended integral flange 7^a may be formed on the walls 7, which may be riveted to the web 1 of the bottom member.

As shown in Fig. 8, the flange 4^a may be located outside the wall 7, if desired, and in this connection the wall 7 may be crimped in, as shown in Fig. 9, to take in the exteriorly-arranged flange 4^a. Furthermore, the wall 7 may also be provided with inturned flange 7^b, as shown in Fig. 10, which flange adds to the strength of the connection at this point. The bolster may be crimped in this form, or the exterior flange 4^a may lie in a plane beyond the wall 7, as shown in Fig. 7.

Column-guides 11 are connected with the vertical side walls of the parts A and B when united, and vertically-extended angles 12 may be connected therewith and with the bolster to form column-guides. These plates 11 may be arched to clear the rivet-heads used at that part of the bolster.

Secured in the open end of the bolster is a flanged cap-piece 13 (shown at the right in Fig. 2) for closing the same, if desired.

We are aware that minor changes in the construction, arrangement, and combination of the several parts of our device can be made and substituted for those herein shown and described without in the least departing from the nature and principle of our invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In a box-girder-like bolster, the combination with the two members formed with horizontal flanges part of their length, which flanges are riveted together, and vertical flanges or walls throughout the remaining portion, which are riveted together; substantially as described.

2. A box-girder-like bolster comprising two trough-shaped members having lateral flanges riveted together at the middle of the bolster, and vertical flanges or walls riveted together at the ends of the bolster; substantially as described.

3. In a bolster, the combination with a top member having a corrugated web, and a bottom member secured to the lower edges of the top member; substantially as described.

4. In a bolster, the combination with a top member of an inverted-U shape, and a bottom trough-shaped member riveted thereto through the medium of horizontal and vertical flanges; substantially as described.

5. In a bolster, the combination with a top member having a corrugated top wall, and a member deepest at its center, which member

is secured to the top member by rivets; substantially as described.

6. In a bolster, the combination with a top member having lateral flanges throughout the middle portion of its lower edge, a bottom member deepest at its middle, and having lateral flanges throughout the middle portion of its upper edge which are riveted to the flanges of the top member, said bottom member having vertical walls or flanges riveted to the vertical walls of the top member; substantially as described.

7. In a bolster, the combination with top and bottom members having lateral flanges which are riveted together, of a pin-socket secured in position between said flanges; substantially as described.

8. In a bolster, the combination with top and bottom flanges which are riveted together, said flanges being bent to form a seat, and a pin-socket secured in position in said seat; substantially as described.

9. In a bolster, the combination with its side wall, of a bent wear-plate 11, and column-guides 12 in the form of separate vertically-arranged angles secured to the edges of the wear-plate; substantially as described.

10. In a bolster, the combination with its side wall, of a plate 11 bent to accommodate the rivets, column-guides 12, and rivets for securing said column-guides and bent plate in position to the side wall; substantially as described.

11. A pressed metallic bolster consisting of a bottom trough-shaped member provided with laterally-projecting flanges for the major portion of its length, near the middle portion thereof, and having upwardly-projecting vertical flanges, projecting to a plane above said lateral flanges near its ends, in combination with an upper member having coincident lateral flanges, and whose vertical walls are adapted to be secured to said upwardly-projecting flanges of the bottom member; substantially as described.

12. In a pressed metallic bolster, a plurality of superimposed trough-shaped members, each of which has integral laterally-projecting flanges extending therefrom for the major portion thereof, box-shaped end portions, column-plates and angles connected with said box-shaped portions, angles secured substantially midway the length of said bolster, and a center-plate secured to said angles; substantially as described.

In testimony whereof we hereunto affix our signatures, in the presence of two witnesses, this 21st day of August, 1903.

JOHN McE. AMES.
JOHN H. AMES.

Witnesses:

P. P. STURDEVANT,
PHILIP B. SHERIDAN.