No. 805,947. PATENTED NOV. 28, 1905.

E. I. DODDS.

CAR PART.

APPLICATION FILED FEB. 23, 1904.

Fig. 1.

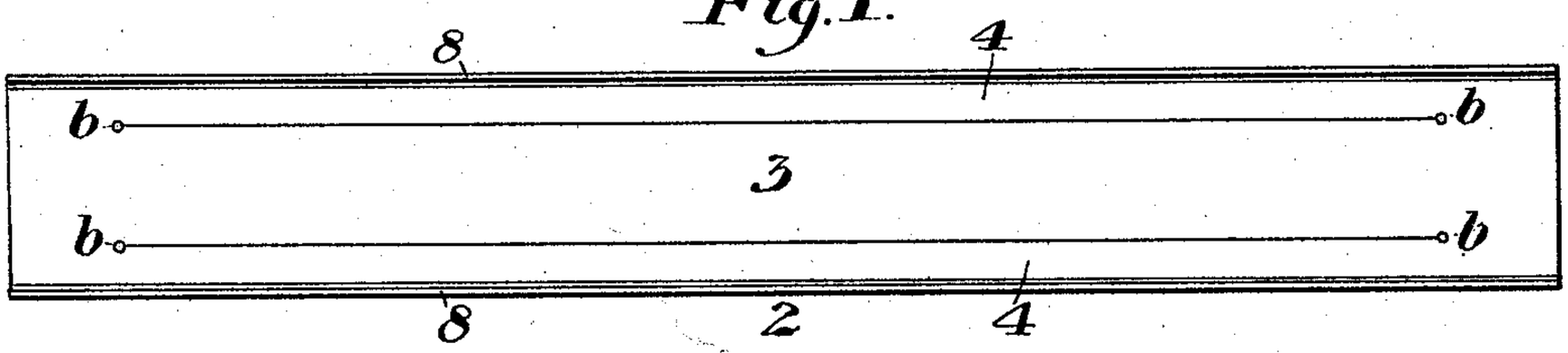


Fig. 2.

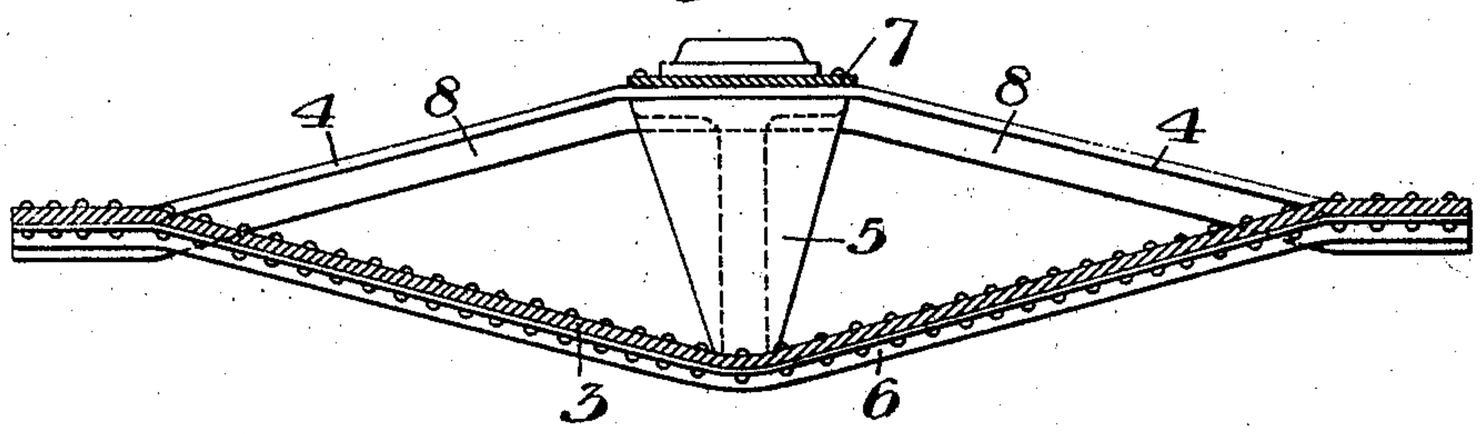
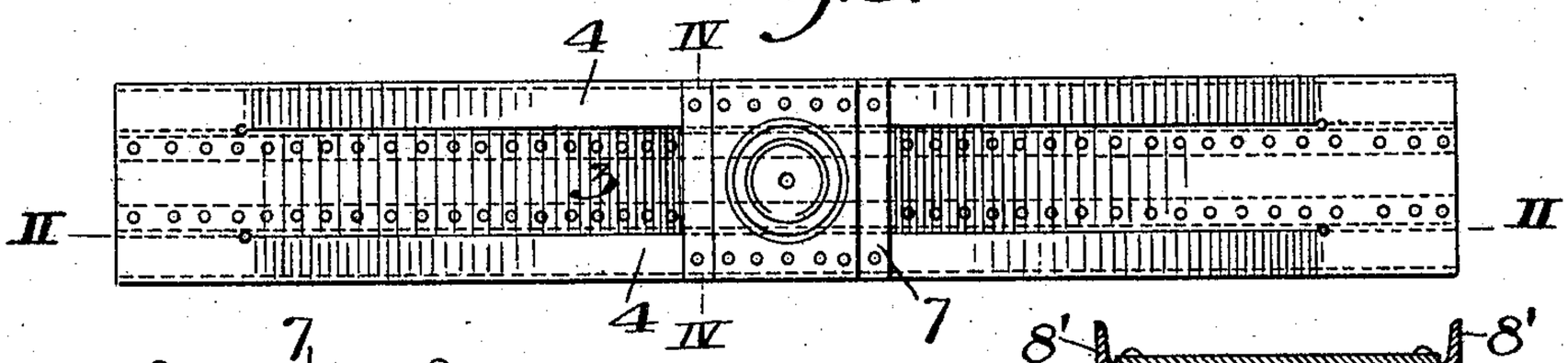


Fig. 3.



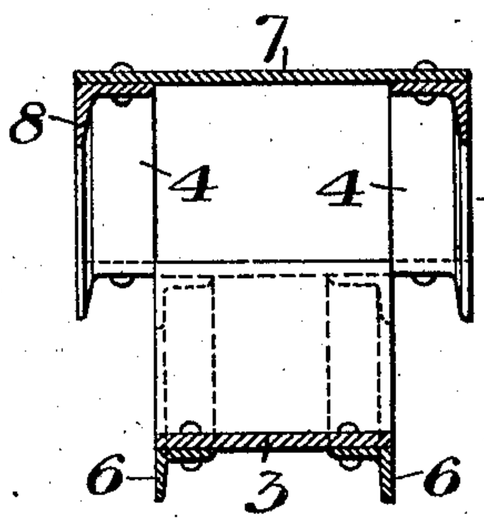


Fig. 4.

Fig. 5.

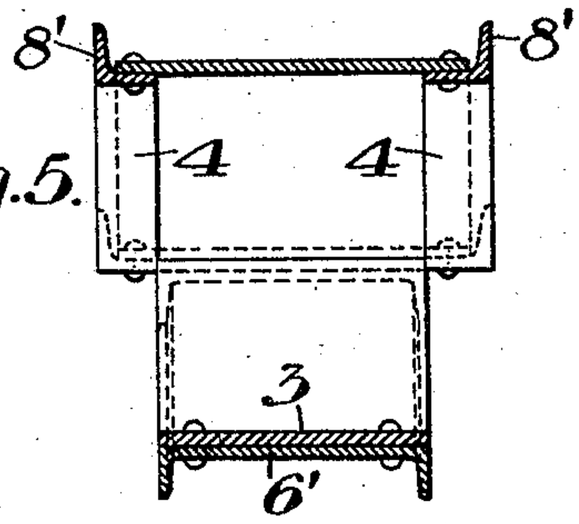
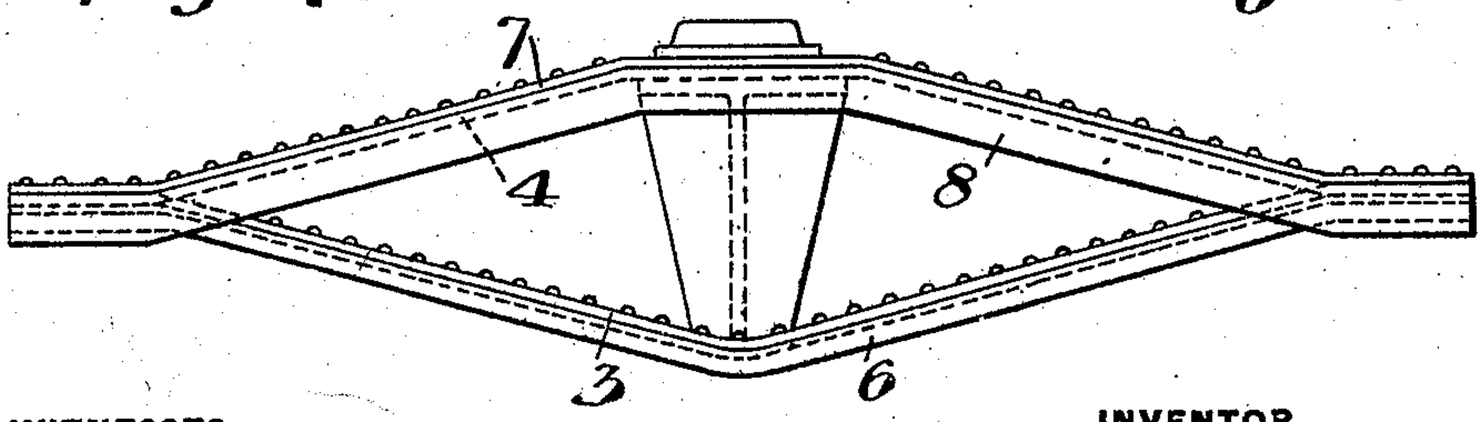


Fig. 6.



WITNESSES

G. M. Viets

M. M. Griffin

INVENTOR

Ethan I. Dodds

UNITED STATES PATENT OFFICE.

ETHAN I. DODDS, OF AVALON, PENNSYLVANIA, ASSIGNOR TO PRESSED STEEL CAR COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

CAR PART.

No. 805,947. Specification of Letters Patent. Patented Nov. 28, 1905.

Application filed February 23, 1904. Serial No. 194,645.

To all whom it may concern:

Be it known that I, ETHAN I. DODDS, of Avalon, Allegheny county, Pennsylvania, have invented a new and useful Improvement in Car Parts, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows a blank from which a bolster is made in accordance with my invention. Fig. 2 is a longitudinal section showing the bolster, the section being on the line II II of Fig. 3. Fig. 3 is a plan view of the bolster. Fig. 4 is a vertical cross-section on the line IV IV of Fig. 3, but on a larger scale. Fig. 5 is a similar section illustrating a modification, and Fig. 6 is a side elevation of a modification of Fig. 3.

The purpose of my invention is to provide a truck-bolster having great strength in proportion to its weight, which can be made cheaply, and with a minimum waste of metal.

In Fig. 1 I show the blank 2 from which the bolster is made. It is a flanged beam-section, either an **I**-beam or a channel-beam, preferably a channel, which is slit along the web by two cuts *b b*, thus dividing the flanged blank into three members—namely, a middle or tension member 3 and two compression members 4 4, which have along their outer edges the original flanges of the channel-section. Then by means of suitable dies I press the middle member 3 in one direction and the two outer flanged members 4 4 in the opposite direction, thus bringing the blank into the condition shown in Fig. 2 and making the frame or body of the bolster. The bolster thus constituted is strengthened by the interposition of a suitable strut or member 5 between the members 4 4 and the middle member 3, and the member 3 is reinforced and strengthened by applying to it reinforcing angle-pieces 6 6, as shown in Fig. 4, thus imparting to it great rigidity and strength. The members 4 4 may be further strengthened by a tie-plate 7, extending from end to end of the bolster, as shown in Figs. 4 and 6.

In Figs. 2, 3, 4, and 6 I show the bolster made with the original flanges 8 8 of the blank directed inwardly toward the member 3. The dies, however, may be constructed to press the member 3 in the opposite direction, and thus to leave the original flanges 8′ 8′ of the blank outwardly directed, as in Fig. 5.

Instead of the reinforcing-angles 6 6 (shown in Fig. 4) I may employ the reinforcing channel-section 6′ along the outer face of the member 3. This reinforcing-channel 6′ may be either pressed or rolled, as desired.

The skilled car constructor will be able to modify the construction of the bolster in many ways without departing from the principle of my invention, since

What I claim is—

1. A bolster comprising outer members having rolled flanges in a plurality of planes at angles to each other and a middle member bent away from said outer members; substantially as described.

2. A bolster comprising outer members having lateral flanges for the attachment of a strut, a middle member bent away from said outer members, and an interposed strut; substantially as described.

3. A bolster having two members, the outer edges of which have rolled flanges, and a middle member bent away from the said two members, said middle member being reinforced by an attached flange or flanges; substantially as described.

4. A bolster having two members, the outer edges of which have rolled flanges, and a middle member bent away from said two members, said middle member being reinforced by an attached flange or flanges, and connected with the other members by a strut; substantially as described.

In testimony whereof I have hereunto set my hand February 20, 1904.

ETHAN I. DODDS.

Witnesses:

JOHN MILLER,

H. M. CORWIN.