(No Model.)

C. E. BAUER.

METAL BOLSTER.

No. 604,556. Patented May 24, 1898.

Fig. 1.

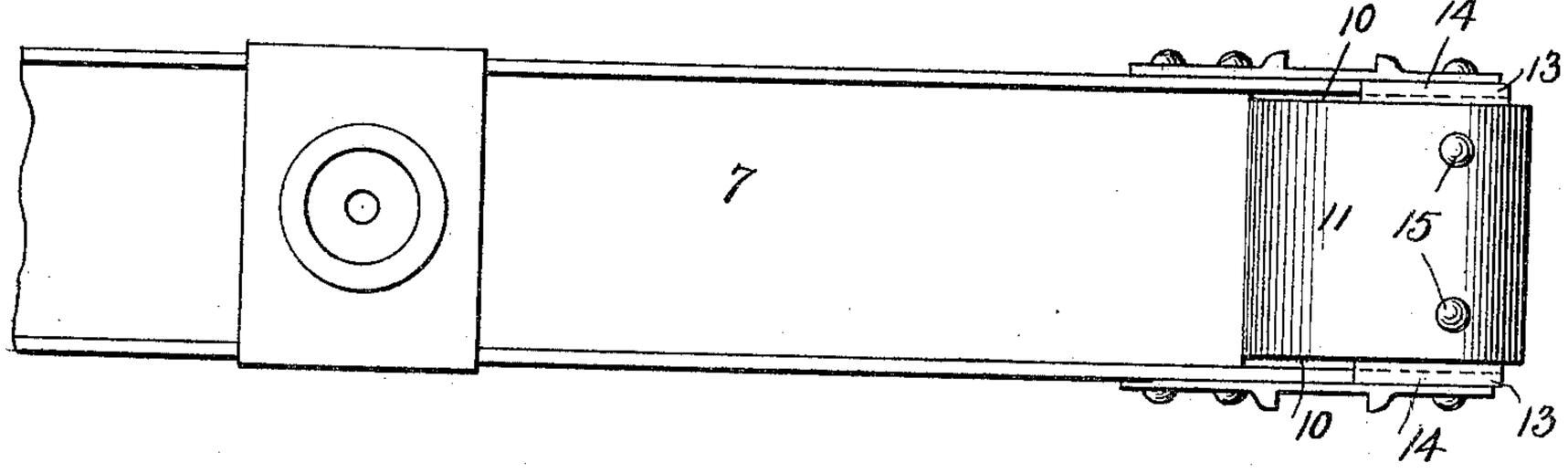


Fig. 2.

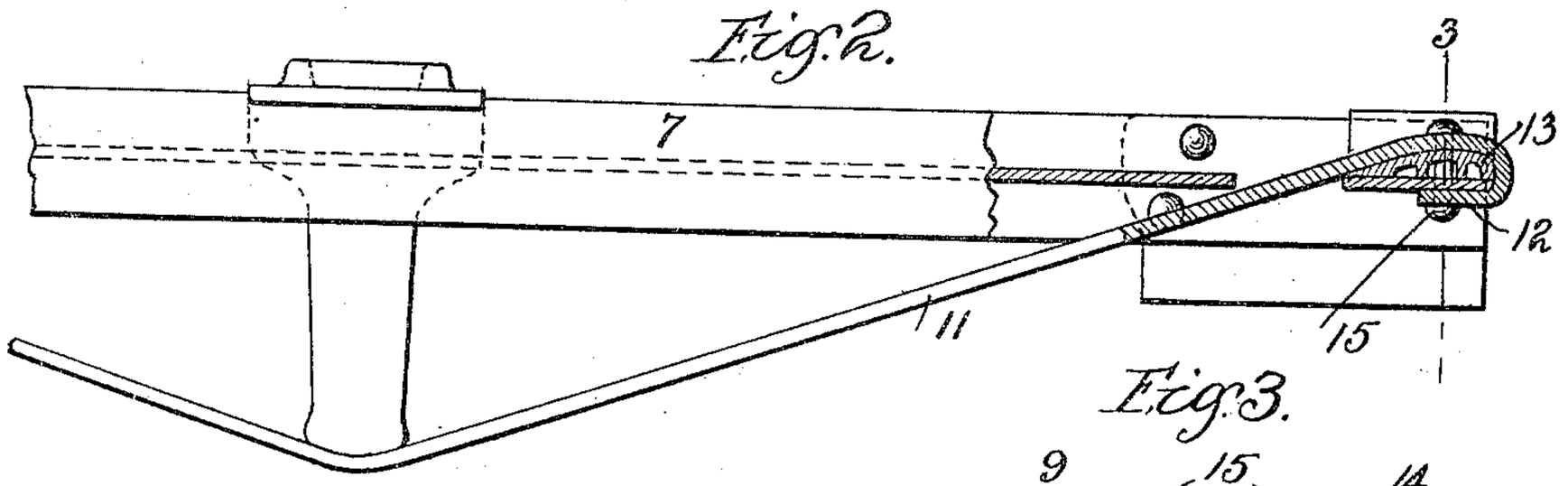


Fig. 3.

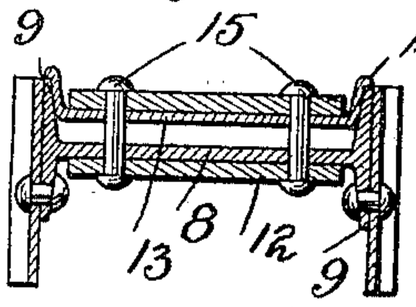


Fig. 4.

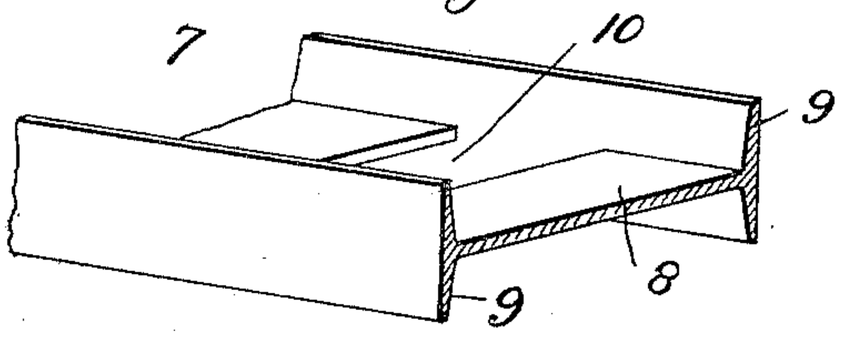


Fig. 6

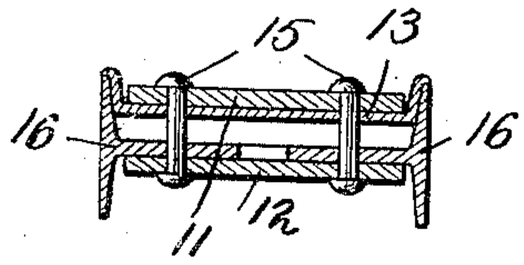
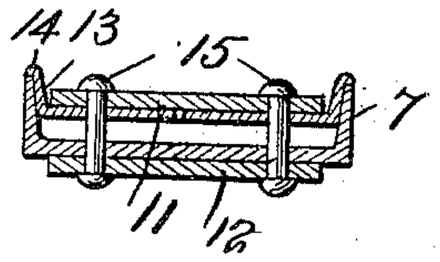


Fig. 5.



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UNITED STATES PATENT OFFICE.

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METAL BOLSTER.

SPECIFICATION forming part of Letters Patent No. 604,556, dated May 24, 1898.

Application filed February 14, 1898. Serial No. 670,183. (No model.)

To all whom it may concern:

Be it known that I, CARL E. BAUER, a citizen of the United States, residing in Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Metal Bolsters, of which the following is a specification.

My invention relates particularly to that class of metal bolsters which are formed of steel, either commercial rolled or pressed, and has special relation to the connection between the compression and tension members at the ends of the bolster. For a compression member I employ a channel, an I-beam, or equivalent construction, and for a tension member I use a strap or plate, the middle support being of any preferred construction. In the horizontal web or thickness of the compression member near each of its ends is formed an oblong opening through which I pass the ends of the tension member, wrapping them about the ends of the compression member, all of which I will now more particularly describe in connection with the accompanying drawings, in which—

Figure 1 is a plan view of my improved bolster. Fig. 2 is a partial elevation of the same, the end being shown in section. Fig. 3 is a section on the line 3 3 of Fig. 2. Fig. 4 shows one end of the compression member with the opening formed therein. Fig. 5 is a section showing the use of a channel for a compression member in place of an I-beam, and Fig. 6 is a view illustrating the substitution of a pair of T-irons as a compression member in place of the channel or I-beam.

The compression member 7 consists mainly of a web or horizontal portion 8, preferably provided with flanges 9 at each side thereof. In the web or horizontal portion of the compression member at each end of the same I form an opening 10. (See Fig. 4.) Through these openings 10 I pass the ends of the tension member 11 in the manner shown in Fig. 2, bending them around the ends of the compression member, as shown at 12, and for the purpose of securing an easier bend and greater strength I insert between the ends of the compression and tension members a filling-piece 13, constructed with hooks or extensions 14 upon its ends, which engage the flanges 9 of the compression member and thereby transmit a considerable portion of the strain to said flanges. As an additional aid in securing the parts a plurality of rivets 15 are inserted.

While, as stated, I prefer to use an I-beam as compression member, a channel could be used in place thereof, if desired, and a section illustrating such construction I have shown in Fig. 5. It is possible that the same form of tension member and end connection might be made in combination with a compression member composed of two T-irons 16, as shown in Fig. 6; but this construction I do not consider as good as the one shown in Figs. 1, 2, and 3.

The filling-piece 13 is preferably made of cast metal, somewhat of a stirrup shape, in order, as already intimated, to transmit a portion of the strain to the flanges of the compression member.

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

1. In a metal bolster, the combination with a middle support and a tension member formed of a plate or strap, of a compression member having an opening through its horizontal portion or web at or near its end, and the tension member passing through said opening and engaging said horizontal portion, substantially as shown and described.

2. In a metal bolster, the combination with a middle support and a tension member, of a compression member having a web and flanges, the web of the same having a hole formed near the end thereof, and the tension member passing through said hole and engaging said web.

3. In a metal bolster, the combination with a middle support and a plate tension member, of a compression member having a web and flanges, the web of the same having a hole formed near the end thereof, the tension member passing through said hole and engaging said web, and a filling-piece embraced between the ends of said compression and tension members and engaging the flanges of said compression member.

CARL E. BAUER.

Witnesses:
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