

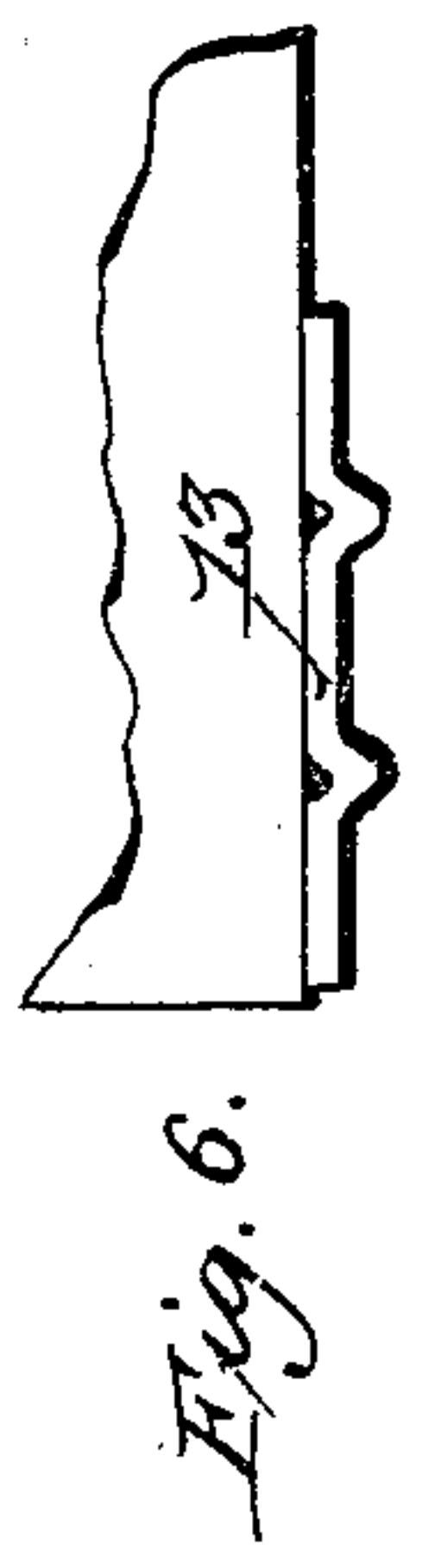
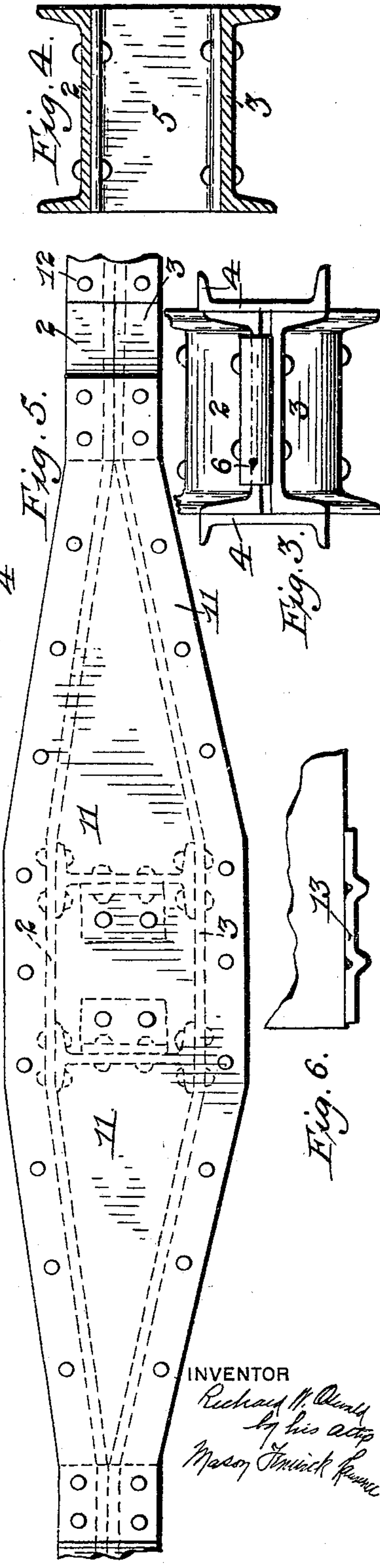
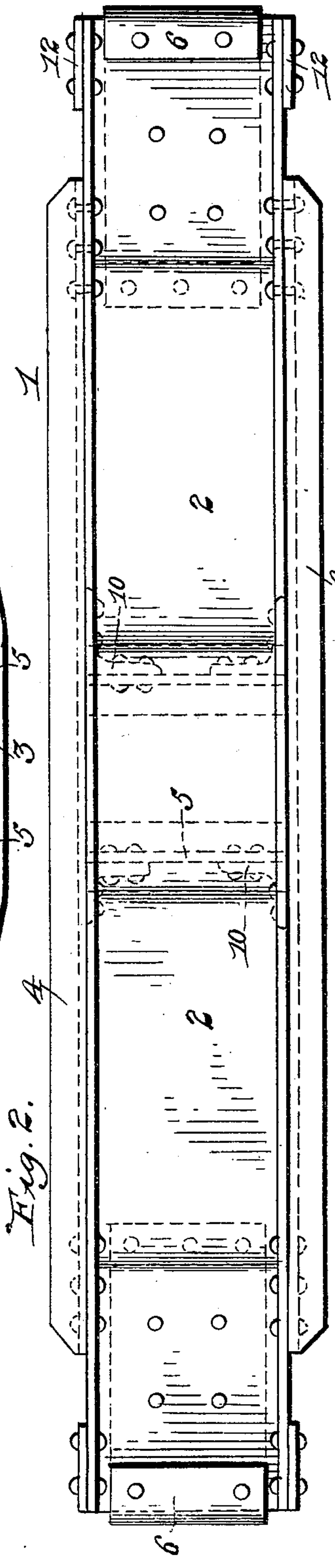
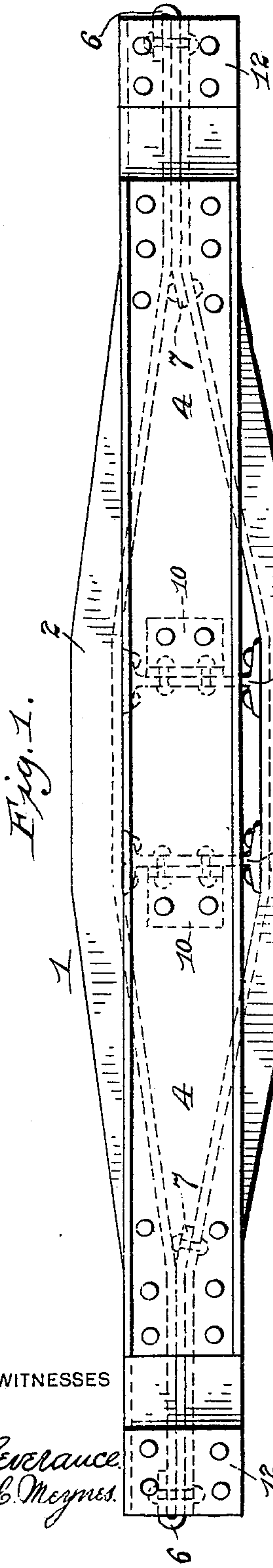
No. 640,693.

Patented Jan. 2, 1900.

R. W. OSWALD.
TRUCK BOLSTER.

(Application filed Mar. 29, 1899. Renewed Dec. 12, 1899.)

(No Model.)



WITNESSES

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UNITED STATES PATENT OFFICE.

RICHARD W. OSWALD, OF BLOOMSBURG, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO EDWARD B. TUSTIN, OF SAME PLACE.

TRUCK-BOLSTER.

SPECIFICATION forming part of Letters Patent No. 640,693, dated January 2, 1900.

Application filed March 29, 1899. Renewed December 12, 1899. Serial No. 740,112. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. OSWALD, a citizen of the United States, residing at Bloomsburg, in the county of Columbia and State of Pennsylvania, have invented certain new and useful Improvements in Truck-Bolsters; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in truck-bolsters; and it consists in a bolster comprising upper and lower members formed of channel beams or irons arranged with their webs horizontal, the said members being spread apart centrally and secured together at their ends, and means for bracing the parts with respect to each other.

It also consists of certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter described and claimed.

In the accompanying drawings, Figure 1 represents a side elevation of a truck-bolster constructed in accordance with my invention. Fig. 2 represents a top plan view of the same. Fig. 3 represents an end view of the bolster; Fig. 4, a central vertical transverse cross-section through the same. Fig. 5 represents a side elevation of a bolster employing a different kind of bracing side plate, and Fig. 6 represents a detail view showing a different way of forming guides at the ends of the bolster.

1 in the drawings represents the bolster; 2, the upper member; 3, the lower member, and 4 a brace-plate secured to the side of the said bolster.

I find that a bolster of great strength and yet of light cost can be produced by the use of channel bars or irons suitably bent and riveted together. The upper member 2 is preferably arranged with its web horizontal and its flanges extending above the web, while the lower member 3 is arranged with its web horizontal and its flanges extending downwardly. The upper member 2 is arched centrally, while the lower member is depressed centrally, the two members being brought together for a portion of their length at each end and securely bolted together. Struts or

braces, as 5 5, are interposed between the upper and lower members 2 and 3 at their central portions, said struts 5 being preferably made of short sections of iron beams and arranged so as to extend transversely with respect to the bolster. The webs of the upper and lower truck-bolster members are bolted or riveted to the flanges of the struts 5 to securely hold them in place. The webs at the end of each of the members 2 and 3 may be bolted directly to each other; but I preferably place a plate, as 6, between the said end portions, the inner ends of said plate 6 being bent downwardly and bolted to the web of the lower member 3, as at 7, while the outer end of each plate 6 is bent upwardly and back upon itself, so as to inclose the web of the upper member 2, as at 8. To further brace the structure, I preferably employ side channel or angle plates, as 4 4, made a little shorter than the bolster, but extending beyond the points where the upper and lower members meet. This channel brace-plate 4 is mounted so that its flanges project outwardly, while its web portion is bolted to the flanges of the upper and lower members 2 and 3. The web of the channel-plate 9 may also be connected and braced with respect to the struts 5 by riveting angle-plates, as 10 10, to the webs of the struts 5 and the webs of the plates 4. It will thus be seen that all of the parts of the bolster are thoroughly braced with respect to each other, so as to receive both vertical and lateral strains with great rigidity.

As seen in Fig. 5 of the drawings, the intermediate plates 6 may be dispensed with at the ends of the bolster, if desired, the webs of the upper and lower members thereof being bolted together. In this view it will also appear that the shape of the side brace-plates may be modified, as they may consist of flat plates 11, cut so as to fit the upper and lower contours of the bolster and riveted to the flanges of the upper and lower members thereof. In order to form vertical guides at the ends of each of the bolsters, plates, as 12 12, may be bolted to the sides of the said bolster at its ends, leaving a space between the said plates and the ends of the side brace-plates 4, as clearly seen in Figs. 1 and 2 of

the drawings. If desired, however, the guides may be formed, as illustrated in Fig. 6 of the drawings, by securing-plates, as 13, having vertical ribs bent therein to form the said guides, the whole being preferably struck up out of a single piece of metal.

It will appear from the above description that I am enabled to take merchantable material—that is, channel or angle irons commonly found in the market—and by very simple manipulation to construct a truck-bolster of great strength and rigidity, thus not only forming a simple construction, but one that is inexpensive.

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

1. A truck-bolster comprising upper and lower members formed of channel-irons having their webs arranged horizontally, and the flanges extending in opposite directions from each other said channel-irons being separated centrally of their length and being brought together at their ends, means applied to the sides of the channel-irons for bracing the centrally-separated parts with respect to each other, and means for securing the ends to form a suitable structure, substantially as described.

2. A truck-bolster comprising upper and lower channel-beam members having their webs arranged horizontally, the flanges of the upper member extending upwardly, while the flanges of the lower member extend downwardly, struts interposed between the central arched portions of the said members, the ends of said members being brought together and bolted or riveted, side brace-plates formed of

angle-iron and riveted to the flanges of the channel-irons, and means for securing the side brace-plates to the struts, substantially as described.

3. A truck-bolster comprising upper and lower arched members having their webs arranged horizontally and their flanges vertically, plates interposed between the ends of the said members, said plates having hooked end portions for inclosing the web of one of the members, struts interposed between the central arched portions of the channel-irons, side channel-irons for bracing the structure having its web riveted or otherwise secured to the flanges of the upper and lower members and brace-plates secured to the webs of the struts and the web of the side channel-iron to further brace the parts together, substantially as described.

4. A truck-bolster comprising upper and lower members formed of channel beams or irons arched centrally, their end portions being brought together, struts formed of short I-beams arranged transversely of the bolster, side brace-plates riveted to the flanges of the channel-beams and braced with respect to the I-beams, plates for forming guides between themselves and the ends of the said brace-plates, said plates being riveted or otherwise secured to the ends of the bolster, substantially as described.

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

RICHARD W. OSWALD.

Witnesses:

S. F. PEACOCK,
R. L. ORANGE.