

No. 720,238.

PATENTED FEB. 10, 1903.

G. H. GOODELL.
CAR BOLSTER.

APPLICATION FILED MAY 28, 1902.

NO MODEL.

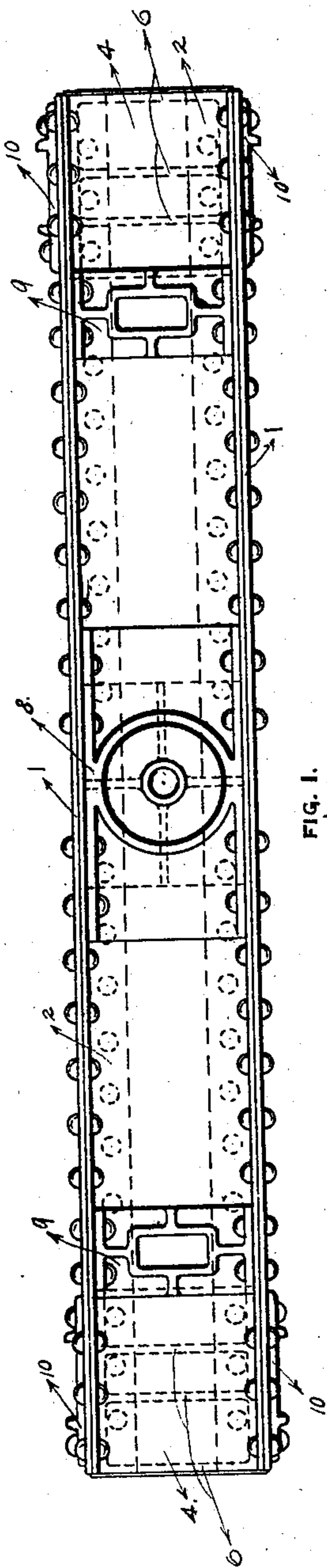


FIG. 1.

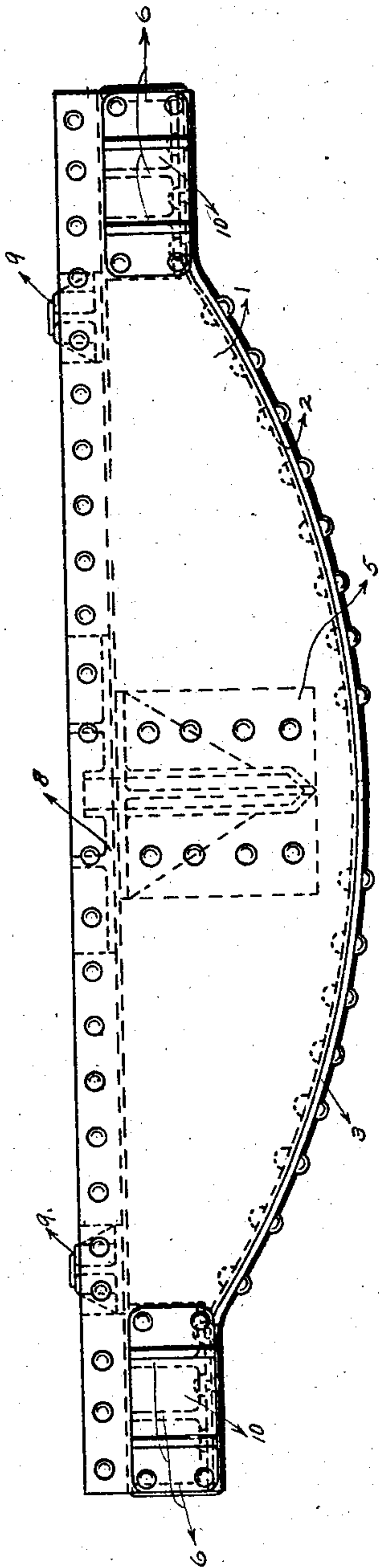


FIG. 2.

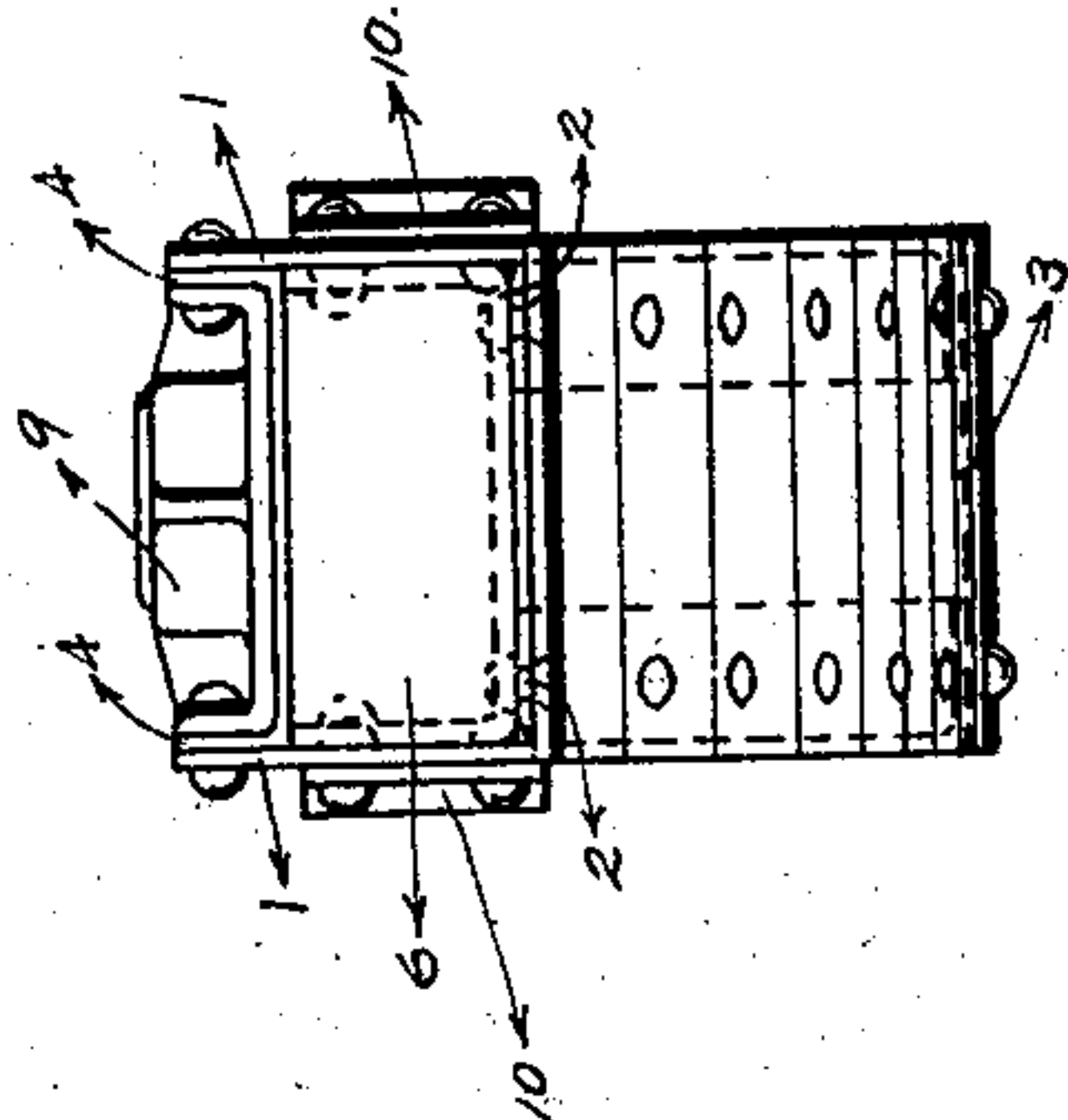


FIG. 3.

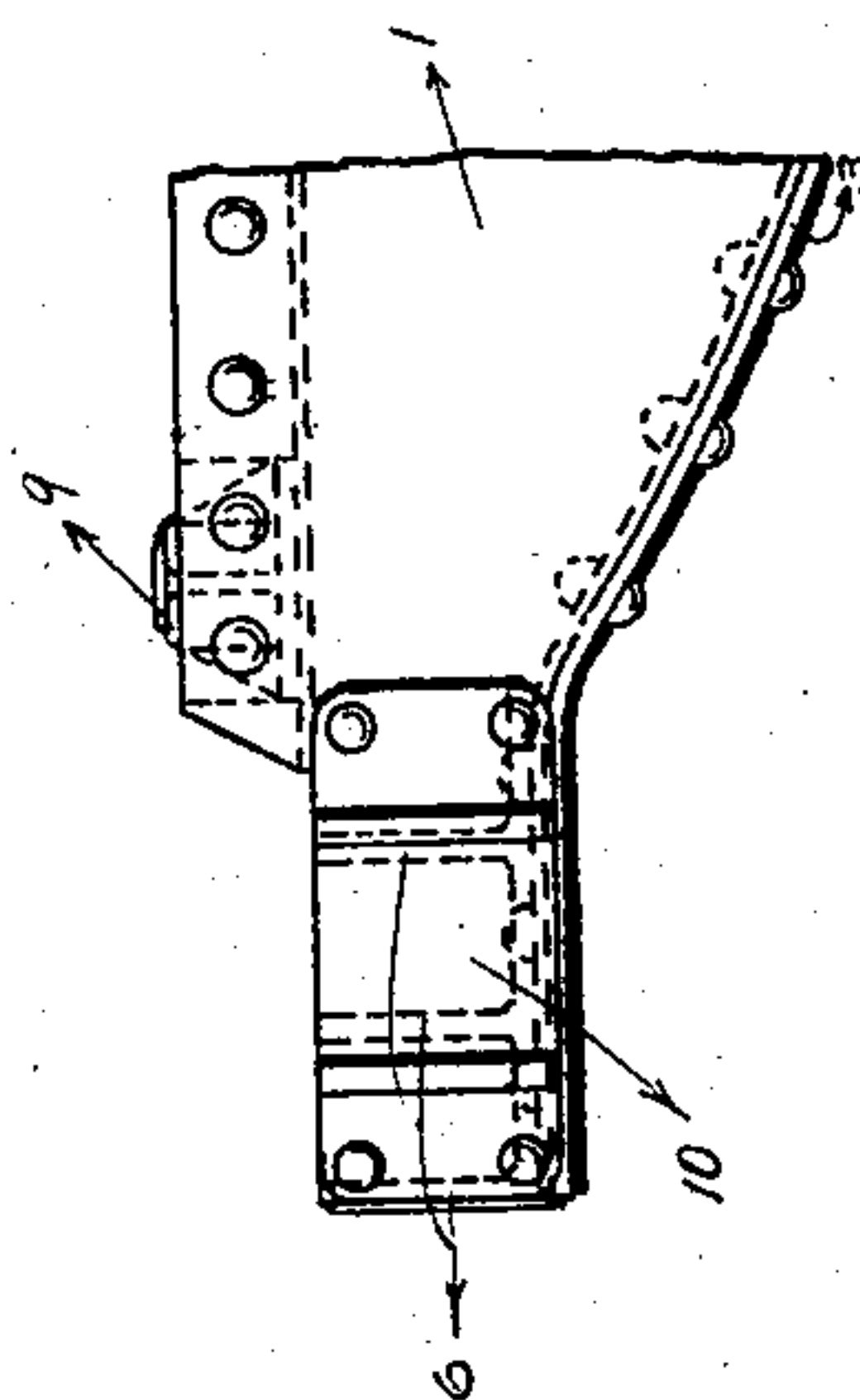


FIG. 5.

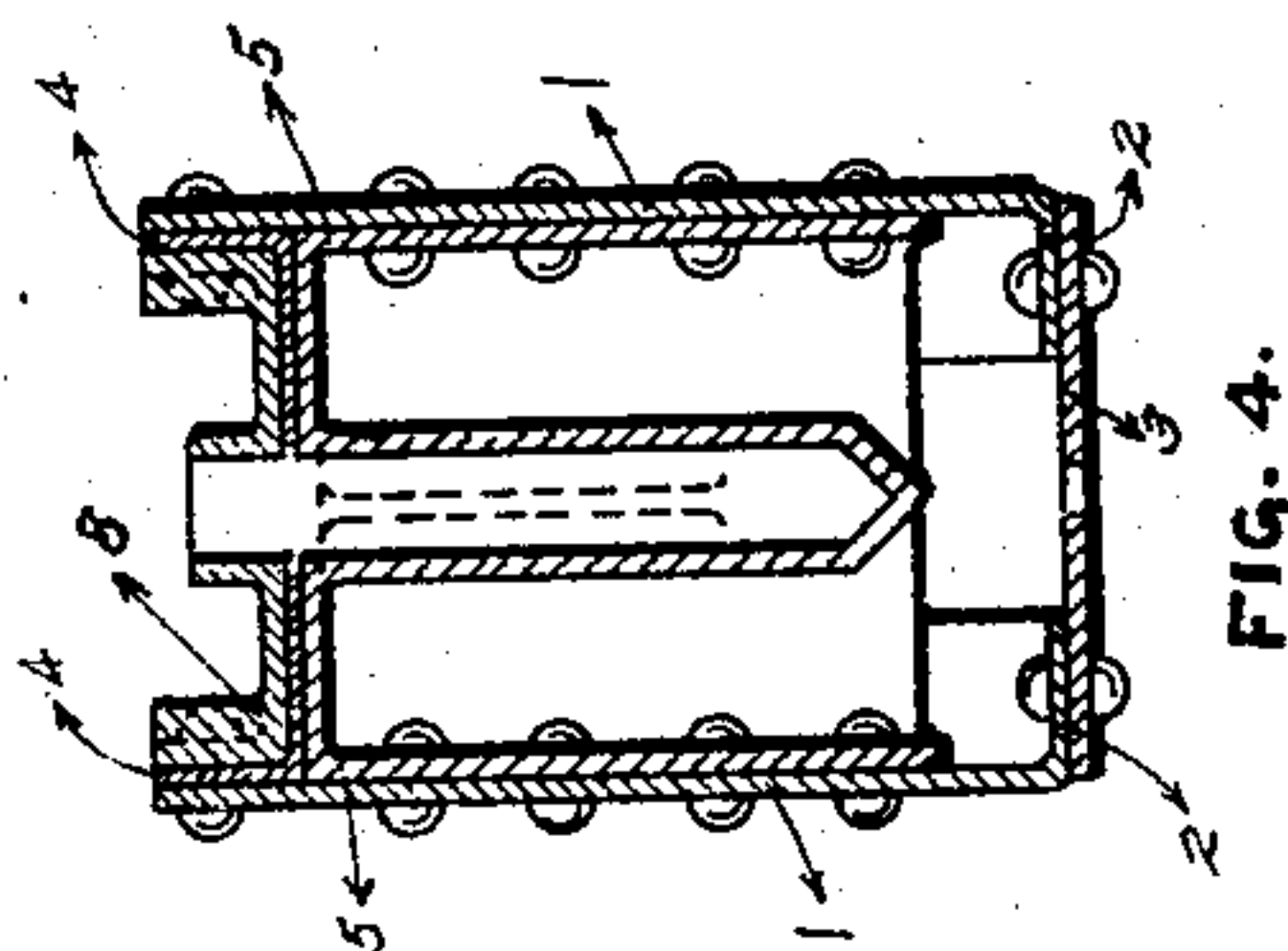


FIG. 4.

WITNESS

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UNITED STATES PATENT OFFICE.

GEORGE H. GOODELL, OF BELLEME, PENNSYLVANIA, ASSIGNOR TO
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CAR-BOLSTER.

SPECIFICATION forming part of Letters Patent No. 720,238, dated February 10, 1903.

Application filed May 28, 1902. Serial No. 109,318. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. GOODELL, a resident of Belleme, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Car-Bolsters; and I do hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to bolsters for railway-cars; and its object is to provide a construction for either a truck or body bolster which comprises few and simple parts so shaped that they can be secured together by machine-riveting.

In the accompanying drawings, Figure 1 is a plan view of a truck-bolster constructed according to my invention. Fig. 2 is a side view of the same. Fig. 3 is an end view of the same. Fig. 4 is a central transverse section thereof, and Fig. 5 is a detail side view of a modification.

My bolster comprises two L-shaped or angle side members 1 1, placed, preferably, with the flanges 2 thereof at the bottom and turned inwardly, as shown. Riveted to these flanges is the bottom cover-plate 3, which preferably will be placed on the outer or lower side of said flanges. Between the upper edges of the webs of the side members is interposed a trough or channel shaped member 4, placed, preferably, with its flanges projecting upwardly and riveted to the upper edges of the webs of the side members. The bolster is strengthened at its center by the center brace 5 and at its ends by the end braces 6, suitably secured to the other members of the bolster. The side members 1 will preferably be formed of varying depth, being greatest at the center and decreasing toward the ends, as shown in Fig. 2. This increased depth may be secured by forming the lower edges of said members on curves or inclined lines, as shown, or by forming the lower edge straight and having the upper edge thereof curved or inclined or by having both the upper and the lower edges curved or inclined.

The cover-plate 3 may be varied in width and thickness so as to give the necessary distribution of metal in the cross-section of the bolster with the greatest economy. If for any

reason, such as the greater ability of the metal selected for the construction of this bolster to withstand compression rather than tensile stresses, it is desired to increase the stress on the compression side, the dimensions of the plate 3 can be so chosen as to produce any desired distribution of stresses.

In constructing this bolster the bottom cover-plate 3 will first be riveted to the flanges of the side members, and after the center and end braces are secured in place the top channel 4 will be riveted between the upper edges of the webs. By this manner of assembling there is no inside riveting, and all rivets can be driven by machinery, thus greatly reducing the expense of making the bolster. This construction is adapted both for truck and body bolsters. In the drawings I have shown it applied to a truck-bolster with the center bearing-plate 8 and side bearings 9 secured to the upper member thereof and the column-guides 10 secured to the side members. In case the construction is to be used for the body-bolster the center bearing-plate and side bearings will of course be secured to the lower member of the bolster and the column-guides will be omitted.

It is not necessary that the top member 4 extend entirely to the end of the bolster, as it may terminate a short distance from the end of the bolster, as indicated in Fig. 5, and in this case the upper edges of the webs of the side members will also be cut away, as shown. This modification allows of a less depth of truck side frame.

While I have shown the side members placed with the flanges on their lower edges and projecting inwardly, it will be understood that this is not necessary, as the flanges may be formed on the upper edges, if desired, and may project either inwardly or outwardly. In the latter case the bolster will not have as neat a finish as that shown; but it would not be necessary to first rivet the cover-plate 3 to the flanges of the side members, as the outwardly-projecting flanges enable the riveting to be done by machinery, even if the channel member 4 were first riveted in place. It will further be observed that the center bearing-plate 8 and side bearings 9 lie between

the flanges of the trough-shaped member 4 and are secured in place by the same rivets which secure said trough-shaped member to the side members, thus making a single set of 5 rivets perform both functions.

What I claim is—

1. A car-bolster comprising two L-shaped side members placed parallel with each other with the flanges projecting inwardly, a plate 10 secured to the flanges thereof, and a trough-shaped member placed between and secured to the webs of the side members with its flanges projecting vertically.

2. A car-bolster comprising two L-shaped 15 side members of varying depth placed with their flanges projecting inwardly, a flat plate secured to the flanges of said members, and a trough-shaped member placed between and secured to the webs of said side members 20 with its flanges projecting vertically.

3. A car-bolster comprising two L-shaped

side members, a plate secured to the flanges thereof, a trough-shaped member secured to the webs thereof, and a center bearing-plate secured between the flanges of said trough- 25 shaped member.

4. A car-bolster comprising two L-shaped side members having the flanges on their under sides, a plate secured to said flanges, a trough-shaped member placed between and 30 riveted to the webs of the side members with its flanges projecting vertically, and a center bearing-plate and side bearings placed in said trough-shaped member and secured in place by the same rivets which secure the 35 trough-shaped member to the side members.

In testimony whereof I, the said GEORGE H. GOODELL, have hereunto set my hand.

GEORGE H. GOODELL.

Witnesses:

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ROBERT C. TOTTEN.