

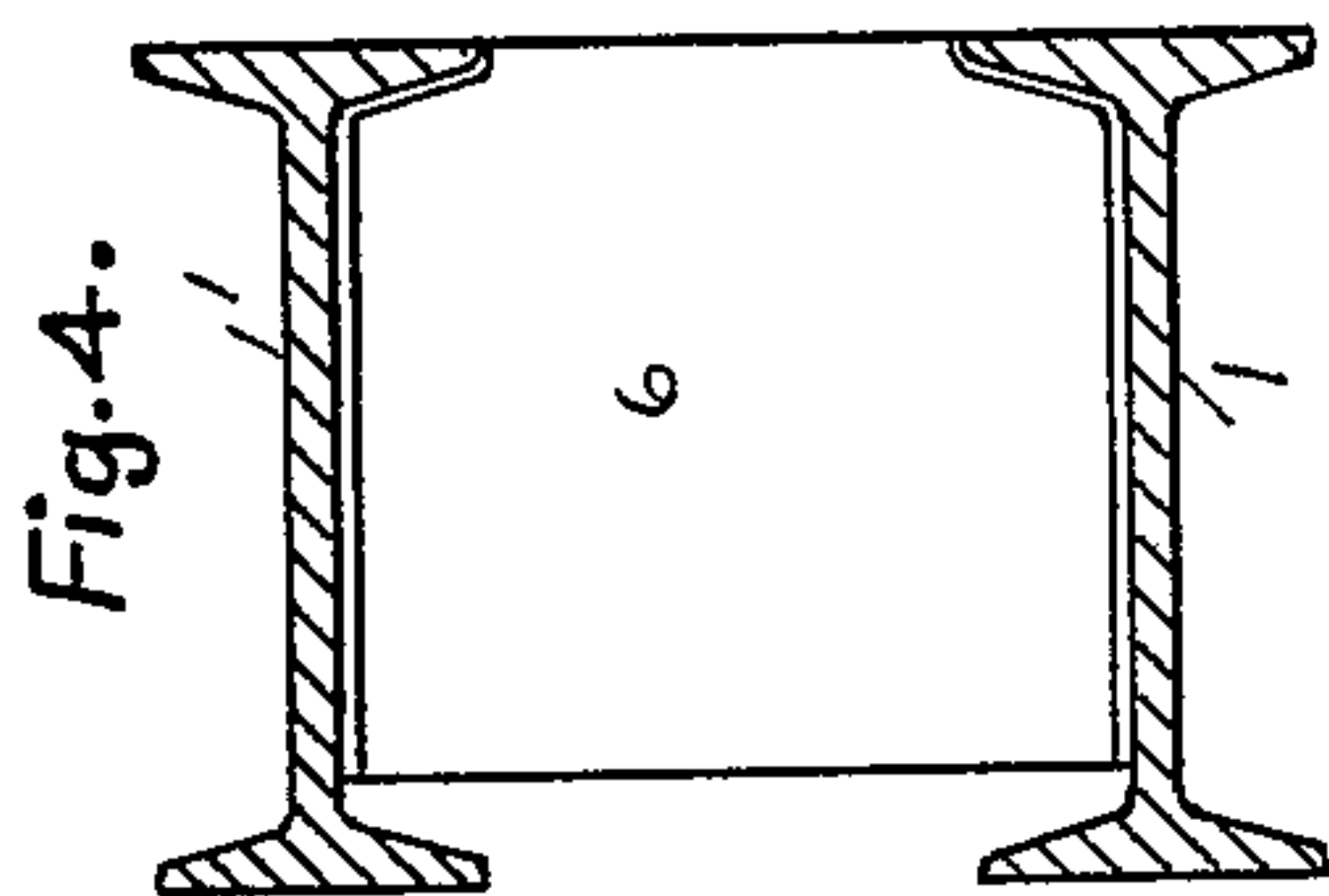
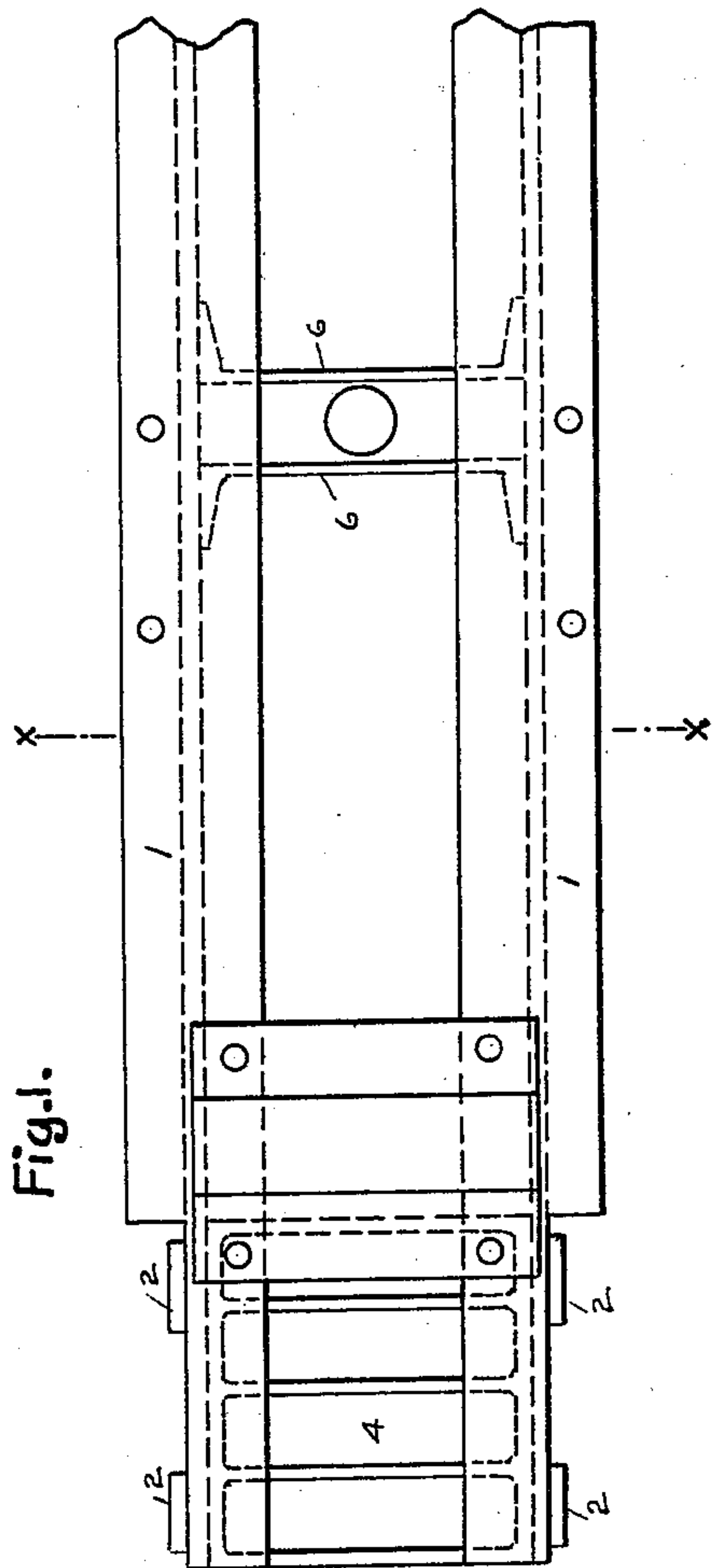
No. 700,564.

Patented May 20, 1902.

R. V. SAGE.
TRUCK BOLSTER.

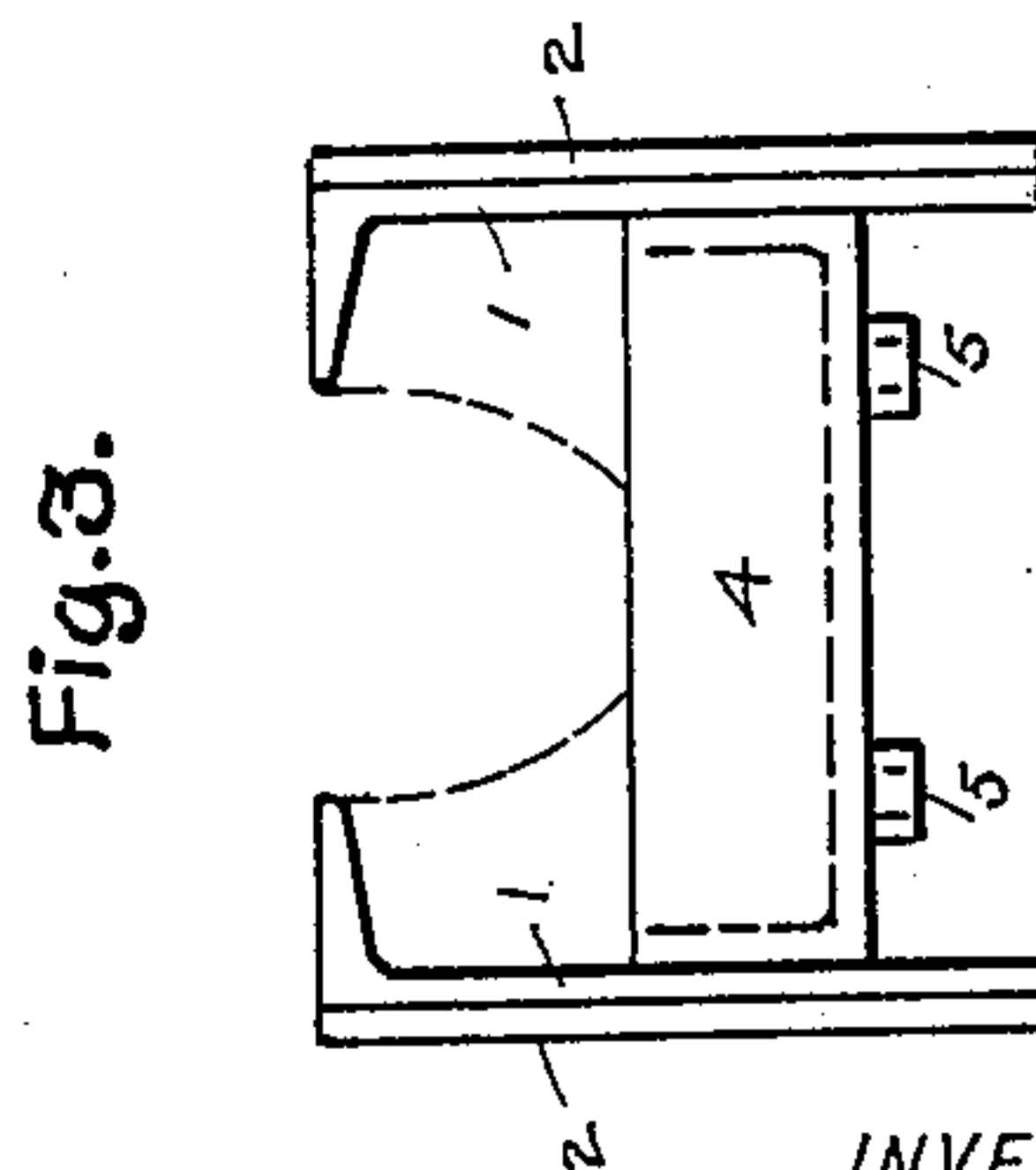
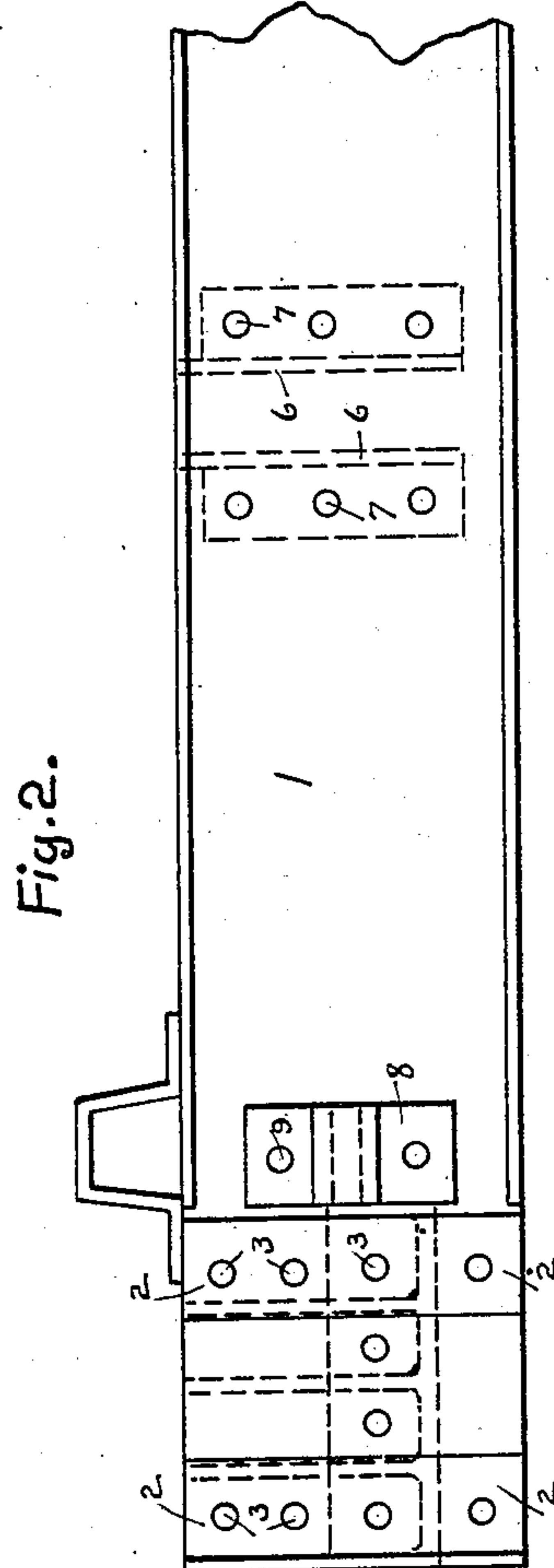
(Application filed Oct. 19, 1901.)

(No Model.)



WITNESSES:

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INVENTOR

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BY

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UNITED STATES PATENT OFFICE.

RALPH V. SAGE, OF JOHNSTOWN, PENNSYLVANIA.

TRUCK-BOLSTER.

SPECIFICATION forming part of Letters Patent No. 700,564, dated May 20, 1902.

Application filed October 19, 1901. Serial No. 79,215. (No model.)

To all whom it may concern:

Be it known that I, RALPH V. SAGE, a citizen of the United States, residing at Johnstown, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Truck-Bolsters, of which the following is a specification.

This invention relates to truck-bolsters, and particularly to bolsters for heavy vehicles or vehicles adapted to carry heavy freight and especially steel gondola cars, and has for its object to provide an improved bolster of the class described which will possess advantages in point of convenience, inexpensiveness, effectiveness, and general efficiency.

Another object of my invention is to provide an improved bolster of the class described the parts of which shall be ordinary merchantable forms, and therefore easily, readily, and inexpensively procured, and which can be assembled without difficulty by ordinary mechanics, and which are particularly adapted to resist the strains to which such bolster is liable and when assembled will constitute a bolster equal to any now in use in strength, durability, and adaptability to the requirements of such a device.

In the drawings, Figure 1 is a plan view of a bolster embodying my improvements. Fig. 2 is a side elevation of the same. Fig. 3 is an end elevation of the same. Fig. 4 is a sectional view on line *xx*, Fig. 1.

Corresponding parts in all the figures are denoted by the same reference characters.

Referring to the drawings, my improved bolster comprises, in general, two I-beams having the flanges on the outside cut away for a distance at each end, two channels secured a short distance apart back to back between the I-beams at the center of the bolster, said channels adapted to receive the king-pin between them, a malleable casting secured between the ends of said I-beams and adapted to receive the bolster-springs, and plates secured on the outside of the ends of the I-beams to form guides for the truck-columns.

In the forms shown in the drawings, and which, if desired, may be the preferred form, my improved bolster comprises two I-beams 1, placed side by side at a suitable distance apart. The flanges of the beams 1 on the out-

side, at each end on both sides, are cut away from the end for a short distance, and a pair of plates 2 are secured at a suitable distance apart to serve as a guide for one of the truck-columns (not shown) on each side of each end of the pair of beams 1 in any suitable manner, herein shown on rivets 3. Between the ends of the beams 1 are secured malleable castings 4, which rest on the bolster-springs. (Not shown.) The castings 4 may, if desired, extend up to and rest against the top inside flanges of the beams 1 and be provided at the bottom with lugs 5 to take the bolster-springs. (Not shown.) About midway of the length of the beams 1 and at a suitable distance apart to receive the king-pin (not shown) between them two channels 6 are secured back to back and with their flanges vertical between the beams 1 in any suitable manner, herein shown as rivets 7, passing through the flanges of the channels 6 and the webs of the beams 1. Brake-hanger castings 8 are secured to the webs of the beams 1, preferably where the cut-away portion of the flanges of the beams 1 ceases, in any suitable manner, herein shown as rivets 9.

The operation and advantages of my invention will be readily understood and appreciated. The I-beams 1, positioned as they are in my improved bolster, offer the greatest possible resistance to strain in the direction such bolster receives it for the amount of metal used, and the channels 6 likewise form the best possible means of reinforcing said beams 1 at the point of greatest weakness. If the castings 4 are extended up to and rest against the top flanges of the beam 1, the said flanges will then serve as additional means of securing said castings 4 in place. Moreover, all the parts except the castings 4 are ordinary merchantable forms easily procured in the open market and not requiring special machinery for their production. The castings 4 are simple and less expensive than the bent plates now used. Then the organization of the parts, while producing a simple, strong, and durable bolster, as good as any now in use, is such that the assemblage of them can be done by any ordinary mechanic.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illus-

trated, as it is manifest that variations and modifications may be made in the features of construction and arrangement, in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of the following claim.

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

15 An improved bolster of the class described, comprising two I-beams parallel to each other, having their outside flanges at the ends cut

away; plates secured on the outside of said ends to serve as guides for the truck-columns; malleable castings secured between the ends of the beams and adapted to receive the bolster-springs; and a pair of channels secured between said beams intermediate the ends of said bolster and adapted to receive the king-pin between them.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

RALPH V. SAGE.

Witnesses:

F. E. MCQUEEN,
WM. P. PARKER.