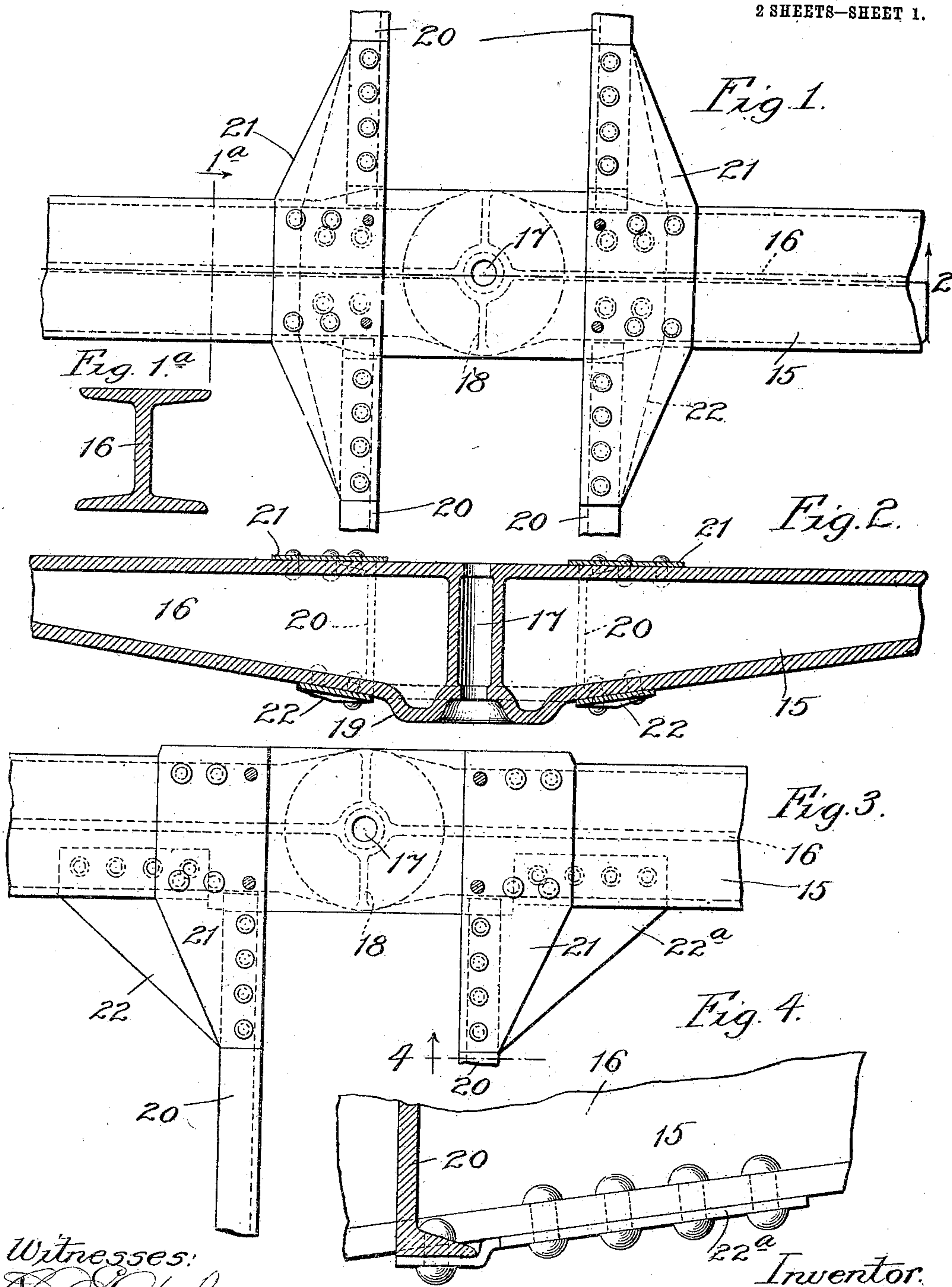


E. POSSON.
 UNDERFRAME FOR RAILWAY CARS.
 APPLICATION FILED OCT. 21, 1907.

940,358.

Patented Nov. 16, 1909.
 2 SHEETS—SHEET 1.



Witnesses:
 E. C. Chayford.
 Chas. H. Buell.

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 Edward Posson.
 By Sheridan & Wilkinson
 Attys.

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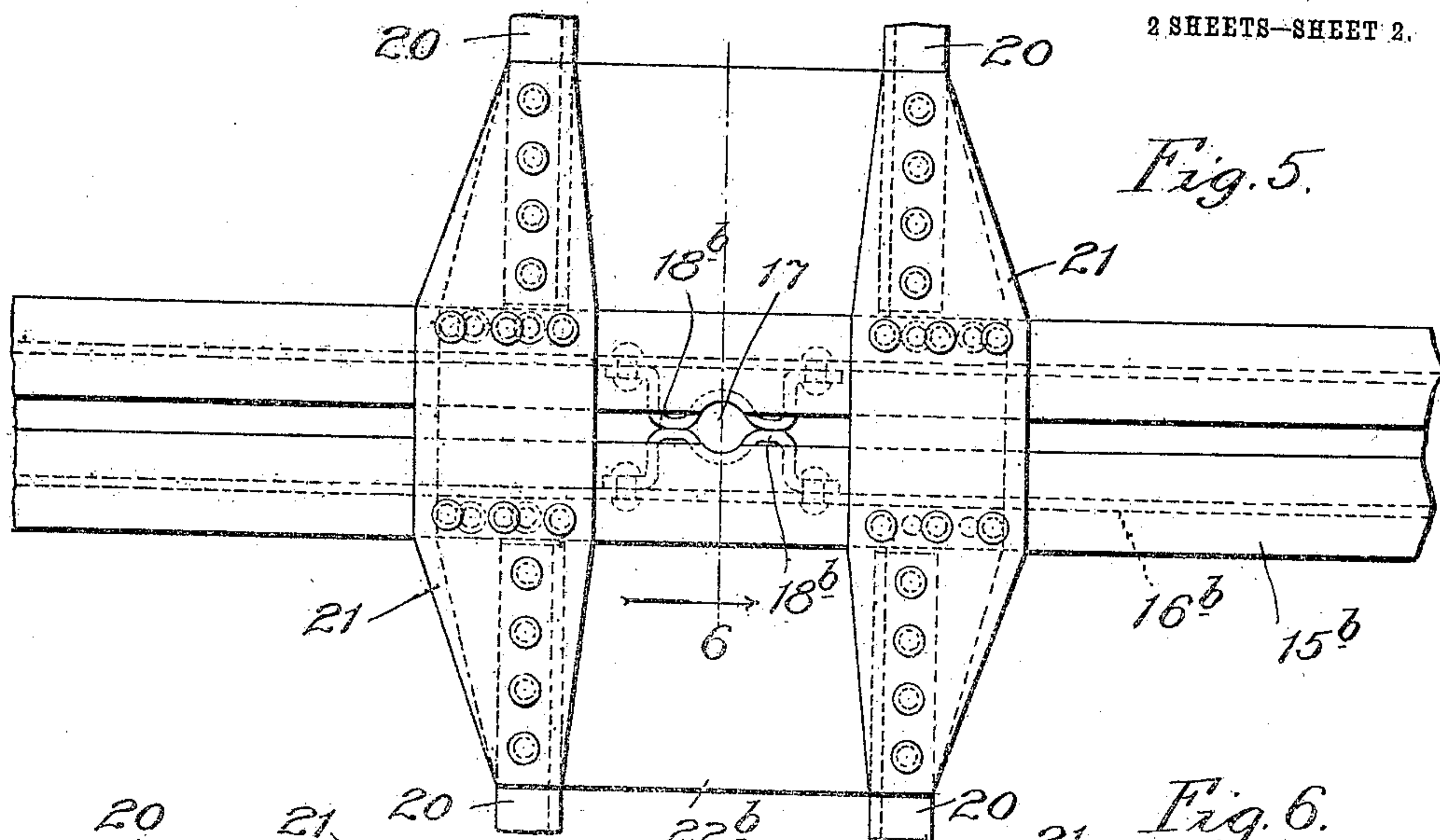


Fig. 5.

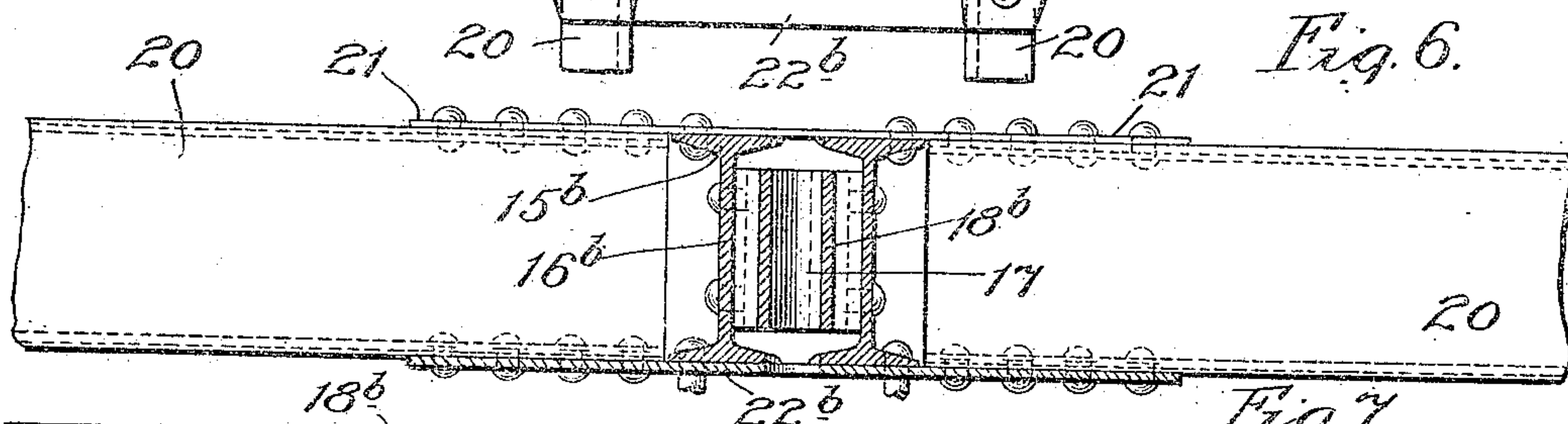


Fig. 6.

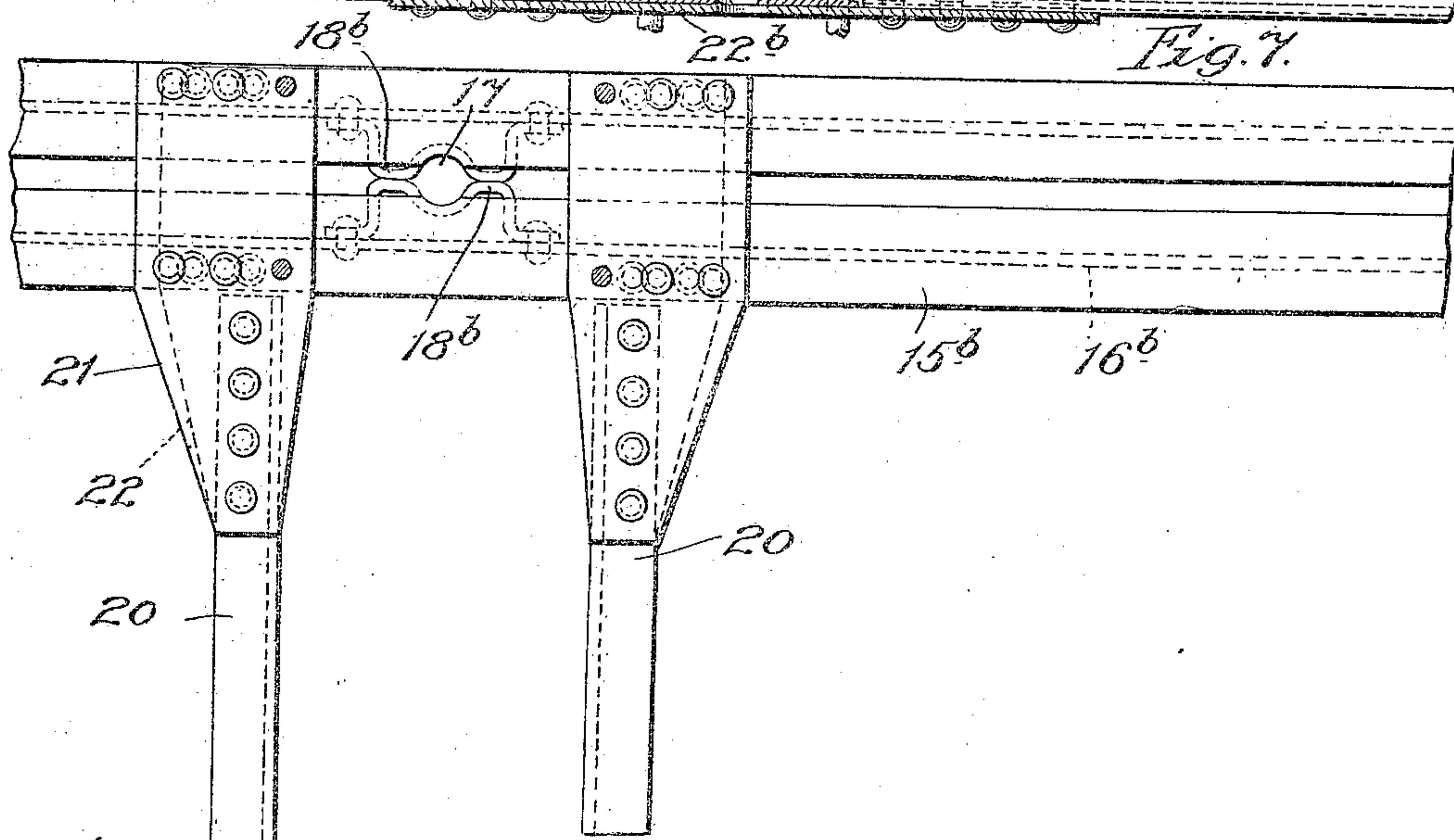


Fig. 7.

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EDWARD POSSON, OF CHICAGO, ILLINOIS.

UNDERFRAME FOR RAILWAY-CARS.

940,358.

Specification of Letters Patent.

Patented Nov. 16, 1909.

Application filed October 21, 1907. Serial No. 398,464.

To all whom it may concern:

Be it known that I, EDWARD POSSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Underframes for Railway-Cars, of which the following is a specification.

The objects of my invention are to provide a new and improved body bolster for cars, and to combine the body bolster with the center sill in an advantageous way.

Referring to the drawings—Figure 1 is a plan view of my improved body bolster, in combination with a center sill. Fig. 1^a is a section of the bolster taken on the line 1^a in Fig. 1. Fig. 2 is a longitudinal section of the bolster taken on the line 2 in Fig. 1. Fig. 3 is a plan view of a modification in which the center sill extends only in one direction from the body bolster. Fig. 4 is a section on the line 4 in Fig. 3, looking in the direction of the arrow. Fig. 5 is a plan view of a modified bolster in combination with a center sill. Fig. 6 is a section on the line 6 in Fig. 5, looking in the direction of the arrow. Fig. 7 is a plan view of a modification in which the center sill extends in only one direction from the bolster.

In the modifications illustrated in Figs. 1, 2, 3 and 4 the bolster 15 consists of a single casting having in a general way an I-section. The web 16 comprises the walls of the king-bolt opening 17 and from this short cross webs 18 radiate. On the under side the casting is shaped to form a seat 19 that will coact with a corresponding seat on the truck frame. The center sill consists of two parallel channel beams 20 having their flanges directed away from each other. These channel beams are interrupted at the intersection of the bolster, and top plates 21 and bottom plates 22 lap over the ends of the channel beams 20 and across the bolster 15 and are riveted to all of these members. The bolster slopes upwardly toward the ends on its under side, as illustrated in Fig. 2, and therefore the plates 22 are bent so that one surface can be riveted to the channel beams 20 and another surface can be riveted to the lower flange of the bolster. In cases where

the greatest degree of strength is not considered necessary, it may be expedient to have the channel beams 20 extend only between the body bolsters 15 and the corresponding ends of the car; that is, the channel beams 20 may be omitted between the two body bolsters. Fig. 3 illustrates this modification. In this case the under plate 22^a is preferably made considerably wider than the corresponding under plate 22 in the modification in Fig. 1.

In the modification of Figs. 5 and 6 the bolster consists of two parallel I-beams 15^b spaced apart slightly. Their webs are represented by the reference character 16^b. Yokes 18^b are riveted to the inner sides of the webs 16^b, and so shaped as to form the hole 17 for the king-bolt. In this modification the under plate 22^b extends clear across from one channel beam 20 to the other.

Fig. 7 illustrates a modification which differs from that of Figs. 5 and 6 only in that the center sill channel beams between the two bolsters have been eliminated, as has already been explained in connection with Figs. 3 and 4, and the under plates 22 do not extend continuously across but are like those shown in Fig. 1.

In this improvement the body bolster extends continuously from one side of the car to the other and the center sill members abut it and are securely attached thereto. Thus desirable rigidity of the body bolster is secured and at the same time the center sill is adapted to withstand the buffing or pulling stresses to which it may be subjected.

What I claim is—

1. In a car, a body bolster having an I-section with a diminishing width of web thereof toward the ends of the bolster, the under flanges thereof sloping upwardly from the center toward the sides of the car, center sill channel beams with their ends abutting the said bolster, and four gusset plates overlapping the joints between said channel beams and the bolster both above and below.

2. In a car, a body bolster having an I-section with a diminishing width of web thereof toward the ends of the bolster, the under flanges thereof sloping upwardly from the center toward the sides of the car, center

sill channel beams with their ends abutting the said bolster, and four gusset plates overlapping the joints between said channel beams and the bolster both above and below,
5 the lower gusset plates having their intermediate portion in an inclined plane lying close against the sloping undersides of the

bolster and having their end portions in a horizontal plane underlying the ends of the center sill channel beams.

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Witnesses:

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