

No. 685,422.

Patented Oct. 29, 1901.

G. S. HASTINGS.  
BODY BOLSTER FOR RAILWAY CARS.

(Application filed Dec. 1, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.

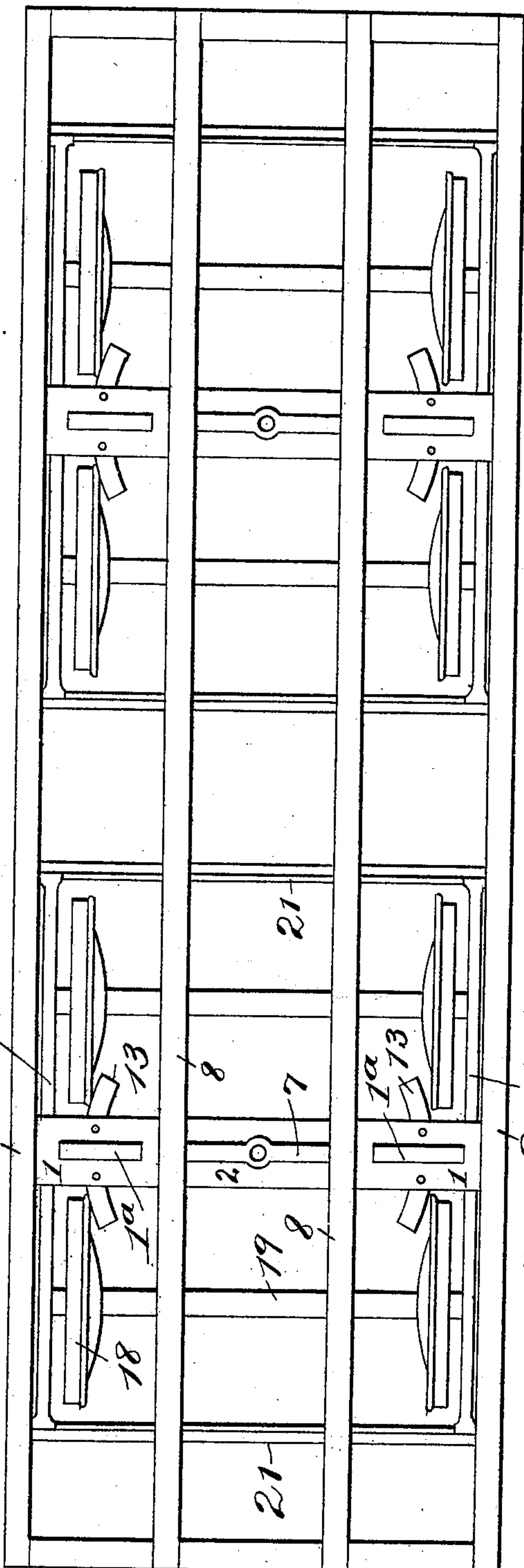
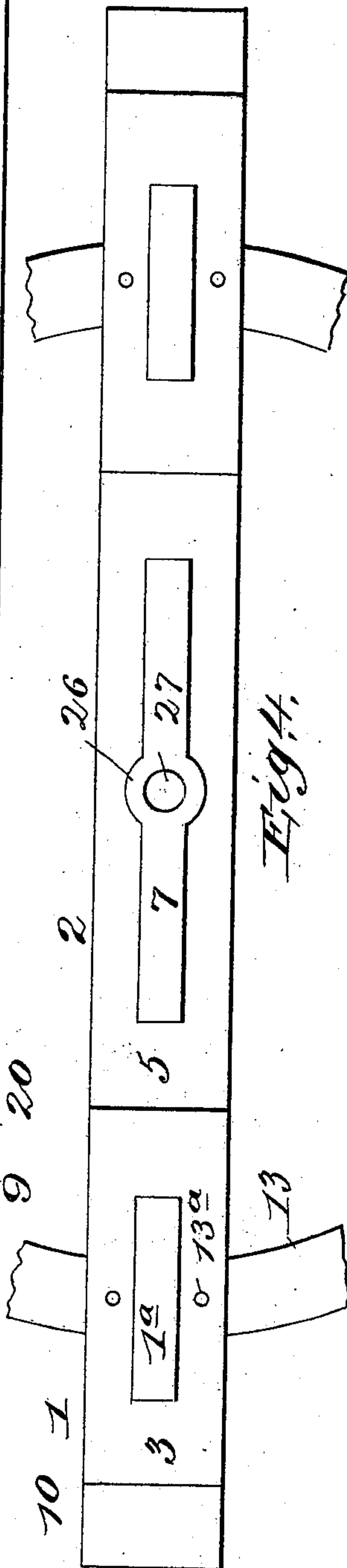


Fig. 4.



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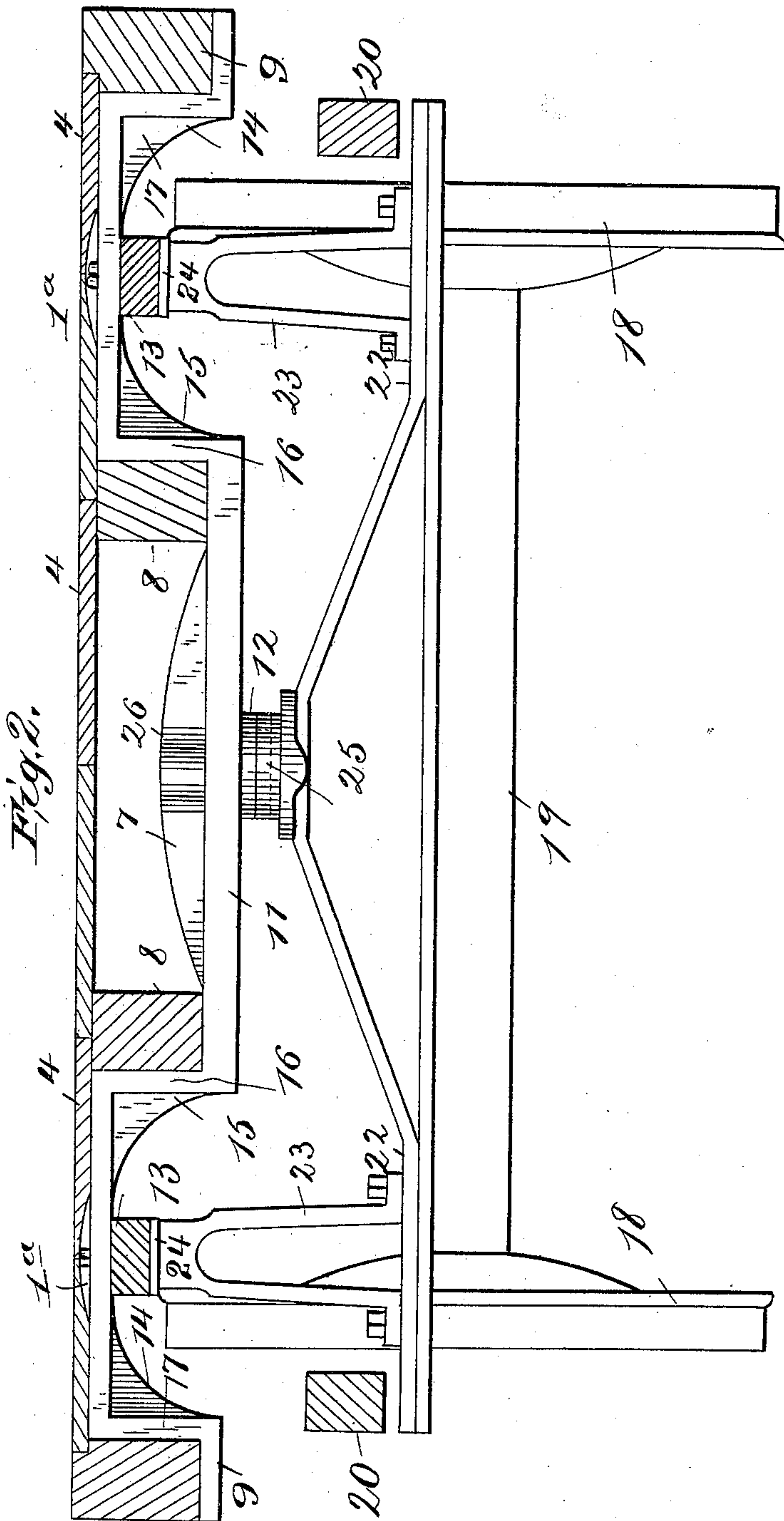
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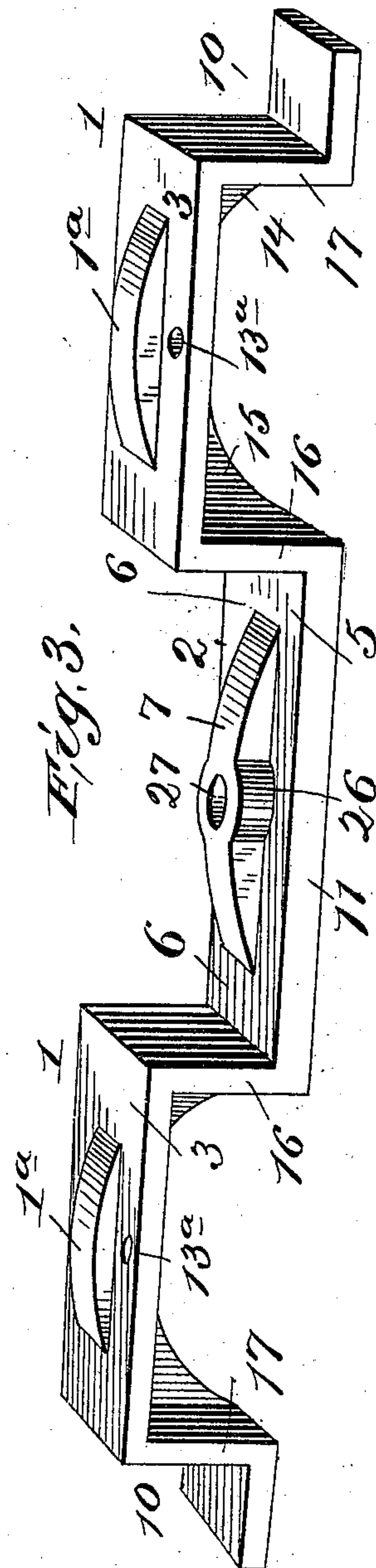
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(No Model.)

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# UNITED STATES PATENT OFFICE.

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JOHN A. BRILL, OF PHILADELPHIA, PENNSYLVANIA.

## BODY-BOLSTER FOR RAILWAY-CARS.

SPECIFICATION forming part of Letters Patent No. 685,422, dated October 29, 1901.

Application filed December 1, 1899. Serial No. 738,763. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE S. HASTINGS, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Body-Bolsters for Railway-Cars, of which the following is a specification.

The object of my invention is to provide a bolster in the use of which the car-body is lowered with relation to the truck and which also provides a better support for the floor of the car-body than has heretofore been afforded.

My invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure 1 is a plan view of a car-framing provided with my improved bolsters. Fig. 2 is a sectional elevation, enlarged, through a portion of the car in line *xx*, Fig. 1, diagrammatically illustrating the car-truck. Fig. 3 is a perspective view of the bolster detached, and Fig. 4 is a plan view of the same.

The bolster, (which is preferably made in one piece of cast or wrought metal,) considered as a whole, has elevated ends 1 and a depressed intermediate portion 2. The flat top surfaces 3 of the elevated portions are designed to bear against the floor 4 of the car and support it, as shown in Fig. 2, while the upper face 5 of the depressed portion is formed with spaces 6, determined in width by the length of the upwardly-extending strengthening-web 7, to receive the intermediate sills 8 of the car-body, the outer sills 9 resting upon ledges 10 at the ends of the bolster, the outer portions or ends having an upwardly-extending strengthening-web 1<sup>a</sup>. With the bolster thus formed a good support is afforded for the car-floor, and the car-body is lowered considerably, which is a desirable feature.

To strengthen the bolster at the lowest part of the depressed portion, I increase the thickness of the web.

The truck (diagrammatically illustrated in Fig. 2, and upon which a car-body provided with my improved bolster may be mounted) may comprise the usual wheels 18, axles 19, side and end frames 20 21, bolster 22, the ends of which extend under the side frame and which is suitably suspended therefrom, and

bearing-supports 23, carrying the truck side bearings 24, the bolster being elevated in the center and provided with the usual truck center-bearing 25. To allow of the use of a king-pin, the web 7 is expanded transversely, as at 26, and provided with an aperture 27, passing through the web 11, and both bearings may be likewise provided, if desired, directly beneath the sills, as at 11, Fig. 2, which strengthening is also assisted by the web 7.

12 represents the center-bearing of the bolster, and 13 the side bearings. The center-bearing is preferably an integral part of the bolster, and the side bearings may either be integral or, as shown, may be separate parts bolted to the elevated ends 1, between strengthening-webs 14 15, extending between the vertical web 16 of the depressed portion 2 and the vertical web 17 of the ledges 10, holes 13<sup>a</sup> being provided for the purpose.

I claim as my invention—

1. A body-bolster for railway-cars formed with elevated outer portions adapted to receive the car-flooring thereon and a depressed intermediate portion, substantially as set forth.

2. A body-bolster for railway-cars formed with elevated outer portions adapted to receive the car-flooring thereon and a depressed intermediate portion having spaces to receive the sills of a car-body, substantially as set forth.

3. A body-bolster for railway-cars formed with elevated outer portions adapted to receive the car-flooring thereon, a depressed intermediate portion, an elevation on said depressed intermediate portion, said elevation forming spaces to receive the sills of a car-body, substantially as set forth.

4. A body-bolster for railway-cars formed with elevated outer portions adapted to bear against the floor of a car-body, a depressed intermediate portion adapted to receive the inner sills of the car-body, and end ledges adapted to receive the outer sills of the car-body, substantially as set forth.

5. A body-bolster for railway-cars formed with elevated outer portions adapted to bear against the floor of a car-body intermediate depressed sill-receiving portions, an elevation between the sill-receiving portions, a center-



bearing under the said elevation, and side bearings under the elevated outer portions, substantially as set forth.

5 6. A body-bolster for railway-cars formed with elevated outer portions adapted to bear against the floor of a car-body intermediate sill-receiving depressions, an elevation between the depressions, end ledges to receive the outer sills of the car-body, and strength-  
10 ening-webs extending between the elevated outer portions and said ledges, substantially as set forth.

7. A body-bolster for railway-cars formed with elevated outer portions adapted to bear  
15 against the floor of a car-body and intermediate sill-receiving depressions, said depressions being strengthened by integral reinforcements of metal, substantially as set forth.

8. A body-bolster for railway-cars formed  
20 with elevated outer portions adapted to bear against the floor of a car-body, sill-receiving ledges at the ends, depressed spaces for receiving the intermediate sills, and a strengthening-web extending between said depressed  
25 spaces and said ledges, substantially as set forth.

9. A body-bolster for railway-cars with ele-

vated outer portions adapted to bear against the floor of a car-body and depressed sill-receiving spaces, and a strengthening-web extending between said spaces, substantially as  
30 set forth.

10. A body-bolster for railway-cars formed with elevated outer portions adapted to bear against the floor of a car-body and depressed  
35 sill-receiving spaces, and strengthening-webs located on said outer portions, substantially as set forth.

11. In a car, a body-bolster comprising a portion having elevated portions at the ends,  
40 intermediate depressions or spaces receiving the central sills, and depressed ledges at the ends of said elevated portions receiving the side sills, combined with the car-flooring resting on said sills and elevations, and extend-  
45 ing between the side sills.

Signed at the city of Detroit, county of Wayne, State of Michigan, this 21st day of November, 1899.

GEORGE S. HASTINGS.

Witnesses:

FLAVIUS L. BROOKE,  
JAMES D. RASBOROUGH.