

No. 832,555.

PATENTED OCT. 2, 1906.

S. OTIS.  
RAILWAY CAR.  
APPLICATION FILED DEC. 26, 1905.

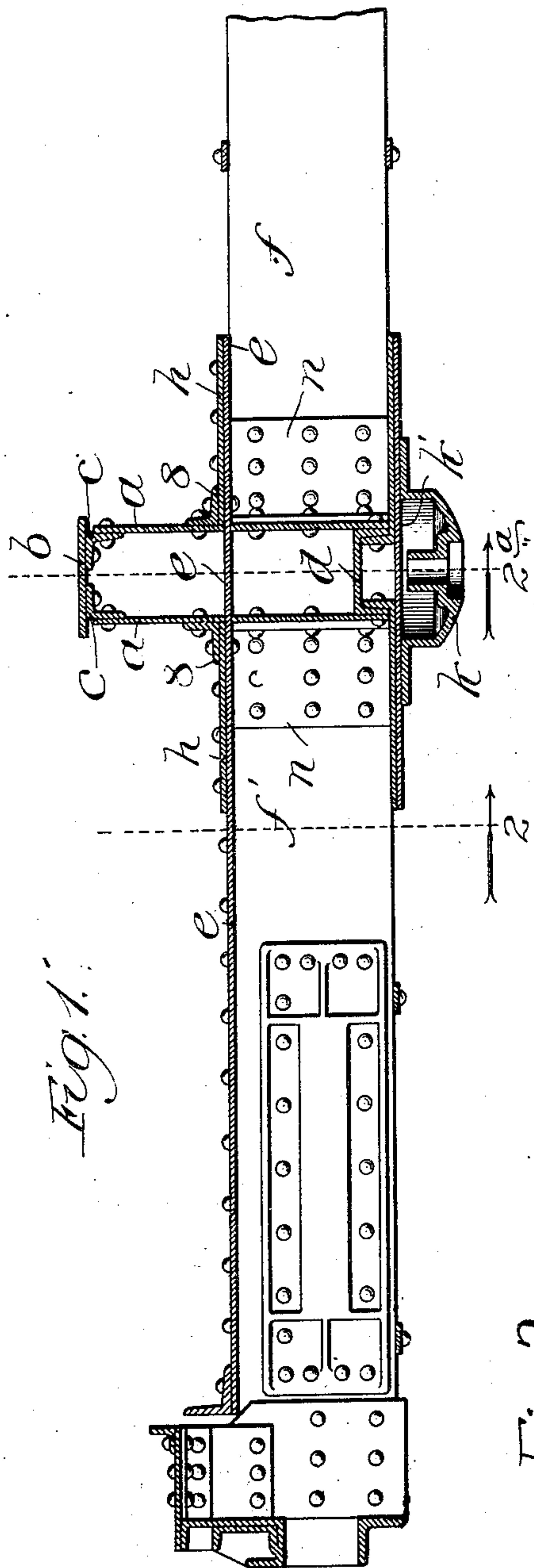
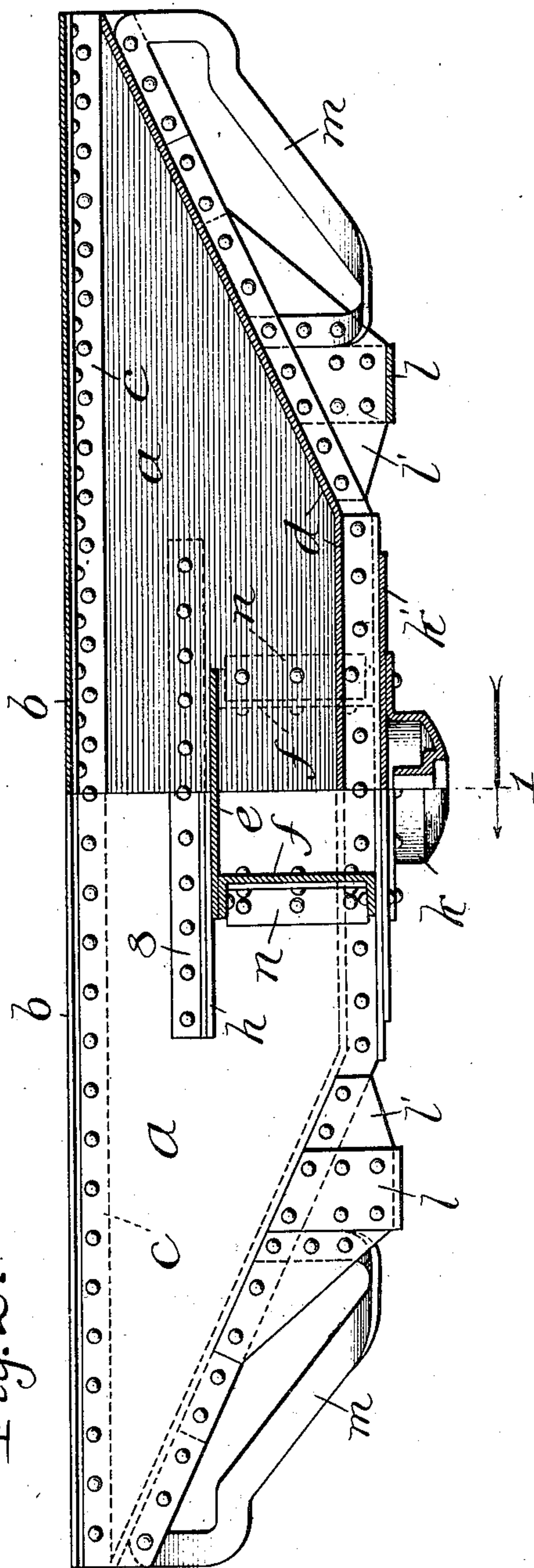


Fig. 2.



Witnesses:  
Edw. Gaylord,  
John Enders.

Inventor:  
Spencer Otis,  
By Thomas F. Sheridan,  
Att'y.



# UNITED STATES PATENT OFFICE.

SPENCER OTIS, OF CHICAGO, ILLINOIS, ASSIGNOR TO NATIONAL COAL DUMP CAR COMPANY, OF RAPID CITY, SOUTH DAKOTA, A CORPORATION OF SOUTH DAKOTA.

## RAILWAY-CAR.

No. 832,555.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed December 26, 1905. Serial No. 293,378.

*To all whom it may concern:*

Be it known that I, SPENCER OTIS, 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 Railway-Cars, of which the following is a specification.

My invention relates to railway-cars, and has for its object to improve the construction thereof by providing a new improved bolster and sill construction, as is more particularly pointed out in the specification and accompanying claims.

In the drawings, Figure 1 is a longitudinal section on the line 1 of Fig. 2, showing parts of the bolster and longitudinal sill. Fig. 2 is an end elevation, partly in section, the sections being made on the lines 2 and 2<sup>a</sup> of Fig. 1.

In the drawings, *a* represents the side members of a body-bolster, these members being formed from an integral metallic plate which extends continuously from end to end and from top to bottom of the bolster.

*b* represents the top member of the bolster, composed of a metallic plate, which is connected to the side members *a* by means of angle-bars *c*, having one flange riveted to the top plate and the other to the side members of the bolster.

*d* represents the lower or tension member of the bolster, which is made of a channeled metal bar having its flanges secured to the sides of the bolster.

*e* represents the top plate of the longitudinal sill. The side members *f* and *f'* of this sill are formed of channel-beams, as shown, and they are securely riveted to the sides of the bolster, the members *f* being secured to one side and the members *f'* to the opposite side thereof. Angle brace-plates *n*, riveted to the bolster and to the side members of the sill, comprise the means for securing said side members to the bolster. As above mentioned, *e* represents the top plate of the longitudinal sill. This top plate is continuous and passes through suitable slots formed in the side members of the bolster, as shown. This continuous top plate is securely riveted to the flanges of the side members of the sill, and the bolster is braced and strengthened at the point where the continuous plate passes through it by means of angle-bars *g*,

riveted to the side members of the bolster and to the top plate. Brace-plates *h* are secured to the top plate adjacent the side members of the bolster.

*k* represents the center bearing, suitably secured to the bottom of the bolster and of the longitudinal sill.

*k'* represents angle brace-plates bracing and strengthening the bolster at its lower central portion.

*l* represents side bearings formed of a U-shaped metallic strap securely riveted to the side members of the bolster, and *l'* represents metallic brace-plates also riveted to the side members and to the metallic straps, as shown.

*m* represents suitable metallic tracks attached at their ends to the side members of the bolster. These tracks are to be used when the bolster is used in a dumping-car having dumping-doors in its bottom and are used to guide the door-operating means in a well-known manner.

My improved bolster and sill is of extreme simplicity and may be made from metallic parts, which may be rolled or bent into shape without the employment of special patterns therefor. By the arrangement which I have described I am enabled to produce a structure which is exceedingly strong and efficient for its purpose.

I claim—

1. A bolster for railway-cars having a top plate, a channel-bottom therefor, side members composed of integral metallic plates extending between the top and bottom members and from end to end of the bolster, and angle-bars riveted to the top plate and to the integral side plates.

2. In a railway-car, the combination of a bolster having integral metallic side plates extending between the top and bottom members of the bolster and from end to end thereof said side plates being provided with slots, longitudinal sills comprising separate sill members secured to the opposite side plates of the bolster, and a continuous top member secured to the side members and passing through the slots in the bolster.

3. In a railway-car, the combination of a bolster having integral metallic side plates extending between the top and bottom members of the bolster and from end to end there-

of, said side plates being provided with slots, longitudinal sills comprising side members secured to the opposite side plates of the bolster, a continuous top member secured to the  
5 side members and passing through the slots in the bolster, and means for bracing the bolster adjacent the slots.

4. A bolster for railway-cars having integral metallic side members extending between the top and bottom members and from  
10 end to end of the bolster, and side bearings composed of U-shaped metallic straps secured to the side members.

5. A bolster for railway-cars having integral metallic side members extending between the top and bottom members and from  
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end to end of the bolster, side bearings composed of U-shaped metallic straps secured to the side members, and brace-plates for the straps secured thereto and to the side members.  
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6. In a railway-car, a bolster having integral metallic side plates connected to the top and bottom plates and extending from end to end of the bolster, and metallic tracks for  
25 door-operating means connected to the side members at the ends of the bolster.

SPENCER OTIS.

Witnesses:

ANNA L. SAVOIE,

JENNIE A. MACEDWARD.