

H. M. PFLAGER.
RAILROAD CAR BRAKE GEAR.
APPLICATION FILED JUNE 29, 1910.

996,134.

Patented June 27, 1911.

Fig. 1.

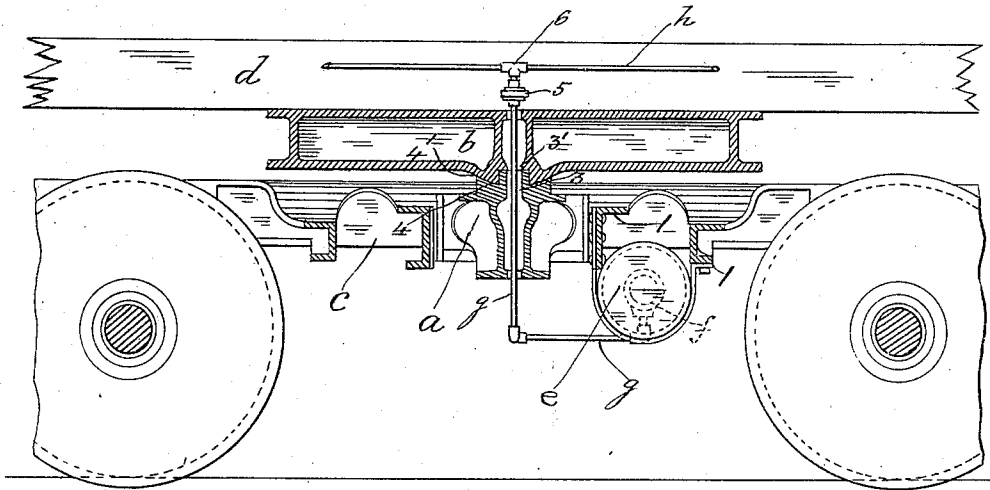


Fig. 2.

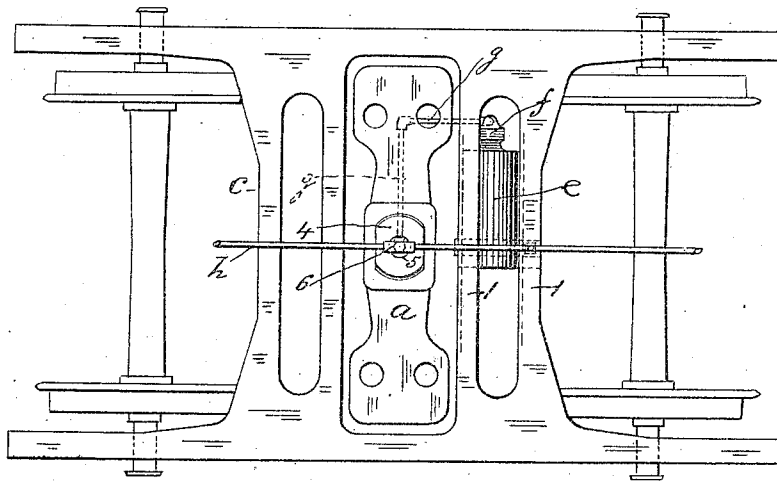
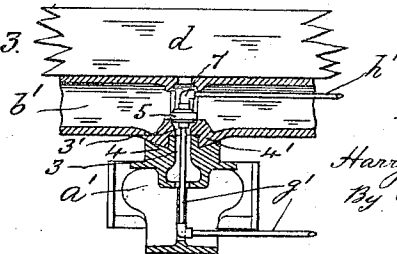


Fig. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

HARRY M. PFLAGER, OF ST. LOUIS, MISSOURI, ASSIGNOR TO DOUBLE BODY BOLSTER COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

RAILROAD-CAR BRAKE-GEAR.

996,134.

Specification of Letters Patent. Patented June 27, 1911.

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To all whom it may concern:

Be it known that I, HARRY M. PFLAGER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Improvement in Railroad-Car Brake-Gear, of which the following is a specification.

My invention relates to that class of air brake-gear for a railroad car in which one or more of the air actuated parts, such as the triple valve or brake-cylinder, are carried by the truck frame, and the other parts, such as the air pipe system, by the car body, and my invention has for its object to enable the said parts respectively, to be connected together in the most simple and direct manner for maintaining a constant communication therethrough in the different positions of the truck relatively to the car body.

It consists in features of novelty as hereinafter described and claimed, reference being had to the accompanying drawing forming part of this specification, whereon,

Figure 1, is a central vertical longitudinal section through the truck and body-bolster of a railroad car, showing preferably, in the present case, the triple valve and auxiliary air reservoir carried by the truck frame, and the triple valve connected with the air pipe system on the car body according to my invention; Fig. 2, a top plan view thereof to reduced scale, omitting the body-bolster, and Fig. 3, a modification of my invention.

Like letters and numerals of reference denote like parts in all the figures.

a represents one of the truck-bolsters, and *b* the body-bolster of a railroad car, the truck-bolster *a* in the present case being adapted to a four-wheeled truck-frame *c* having the usual appendages and brake-gear equipment (not shown), and the body-bolster *b* attached to the underside of the car body *d* in the ordinary well-known manner.

To the transverse members or transoms 1 (or other convenient part) of the truck-frame *c* in the present case, is attached the auxiliary air reservoir *e* and triple valve *f* of the air brake-gear, and to the triple valve *f* is connected one end of a pipe *g* which extends therefrom horizontally beneath the center of the truck-bolster *a* and is thence

directed upward through the center or king-pin openings 3, 3' in the center-plates 4, 4', of the truck-bolster *a* and body-bolster *b* respectively, the upright portion of the pipe *g* being connected at the top, preferably above the body-bolster *b*, with the lower part of a swivel union joint (or equivalent yieldable member) 5 having its upper part connected by preferably, a tee 6 (or otherwise) with the pipe *h* which is in communication with the air pipe system (not shown) on the car body. The vertically disposed portion *g* of the pipe extends through the king pin openings in the truck bolster, and the body bolster, and therefore occupies a vertical position coincident with the axis between the two bolsters, and by locating the swivel joint 5 in the vertical portion of this pipe there is only one flexible joint between the triple valve *f* and the pipe *h* which is in communication with the air brake system on the car body.

In the modification of my invention seen in Fig. 3 where the air pipe system on the car body and the horizontal portion of the triple valve pipe are arranged at different levels to those shown in Fig. 1, the pipe *h'* is connected, preferably by an elbow 7, with the swivel union joint 5, below the top of the body-bolster *b'*, and is directed horizontally (or at any desired inclination) through suitable openings in the latter to its connection with the air pipe system, while the horizontal portion of the triple valve pipe *g'* unites with the upright portion of this pipe above the bottom of the truck-bolster *a'* instead of below as in Fig. 1; and generally, at whatever level the pipe and horizontal portion of the triple valve pipe may be respectively arranged, the upright portion of the latter is adapted to pass through the center-plate openings of the bolsters coincidently with their pivotal axis, and is combined with a single flexible connection between it and the pipe for effecting the required adjustment due to the varying movements between the air actuated parts on the truck-frame and car body respectively.

What I claim as my invention and desire to secure by Letters Patent is:—

1. In a railroad car brake gear, the combination with a body bolster and the truck bolster of an air pipe, wholly independent

of, and extending through said bolsters coincidentally with their pivotal axis, and a swivel joint in said pipe.

2. In a railroad car brake gear, the combination with a body bolster and a truck bolster of an auxiliary air tank and triple valve, an air pipe leading to the triple valve, a portion of which pipe passes through the bolsters coincidentally with their pivotal axis, and a flexible joint in said portion of the pipe.

3. In a railroad car brake gear, the combination with a body bolster and a truck bolster of an auxiliary air tank and triple valve, an air pipe leading to the triple valve, a portion of which pipe passes through the king-pin openings in the center plates of the car bolsters, and a swivel union joint in said portion of the pipe to permit one part of the pipe to rotate horizontally relative to the opposite part of said pipe.

4. In a railroad car brake gear, the combination with a car body and truck bolsters of an air actuated member supported by the car truck, an air pipe passing through the bolsters coincidentally with their pivotal axis and extending to the air actuated member, and a swivel joint located in said pipe, which swivel joint is independent of the car bolsters and the car body.

5. In a railroad car brake gear, the combination with a truck of an air actuated member supported thereby, a pipe leading to said member, a portion of which pipe occupies a position coincidentally with the pivotal axis of said truck bolster, and a swivel joint in said pipe above said truck bolster.

6. In a railroad car brake gear, the combination with a truck frame of an air actuated member supported by said truck frame, a pipe leading to said air actuated member, a portion of which pipe passes through the king-pin opening of the truck frame, and a swivel joint in said portion of the pipe to permit a part thereof to rotate in a horizontal plane relative to the opposite part.

7. In a railroad car brake gear, the combination with a truck frame of an auxiliary air tank carried by said truck frame, a triple valve on the tank, a pipe leading to said triple valve, a portion of which pipe passes

through the opening in the center of the truck bolster, and a swivel joint in said portion of the pipe.

8. In a railroad car brake gear, the combination with the body and truck bolsters, of an air actuated member supported by the car truck, and an air pipe leading to the air actuated member, a portion of which air pipe extends through the king-pin openings in the body and truck bolsters.

9. In a railroad car brake gear, the combination with the body and truck bolsters, of an air actuated member supported by the car truck, and an air pipe passing through the king pin openings in the bolsters, and which pipe leads to the air actuated member on the truck.

10. In a railroad car brake gear of the class described, an air brake pipe adapted to pass through the king pin openings in the center bearing plates of the car body, and truck bolsters, and which pipe is independent of said bolsters.

11. In a railroad car brake gear of the class described, an air brake pipe adapted to pass through the king pin openings in the center bearing plates of the car body and truck bolster, which pipe is independent of said bolster, and a flexible joint in said air pipe.

12. In a railroad car brake gear, the combination with a truck, of an air actuated member carried thereby, a car body bolster pivotally mounted on the truck, and an air pipe leading from the car body to the air actuated member on the truck, a portion of which pipe is coincidental with the pivotal axis between the truck and body bolster.

13. In a railroad car brake gear, the combination with a truck, of an air actuated member carried thereby, a car body bolster pivotally mounted on the truck, an air pipe leading from the car body to the air actuated member on the truck, a portion of which pipe is coincidental with the pivotal axis between the truck and body bolster, and a flexible joint in said air pipe.

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Witnesses:

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