

O. S. PULLIAM.  
CAR BODY UNDERFRAME CONSTRUCTION.  
APPLICATION FILED APR. 23, 1908.

929,245.

Patented July 27, 1909.

Fig. 1.

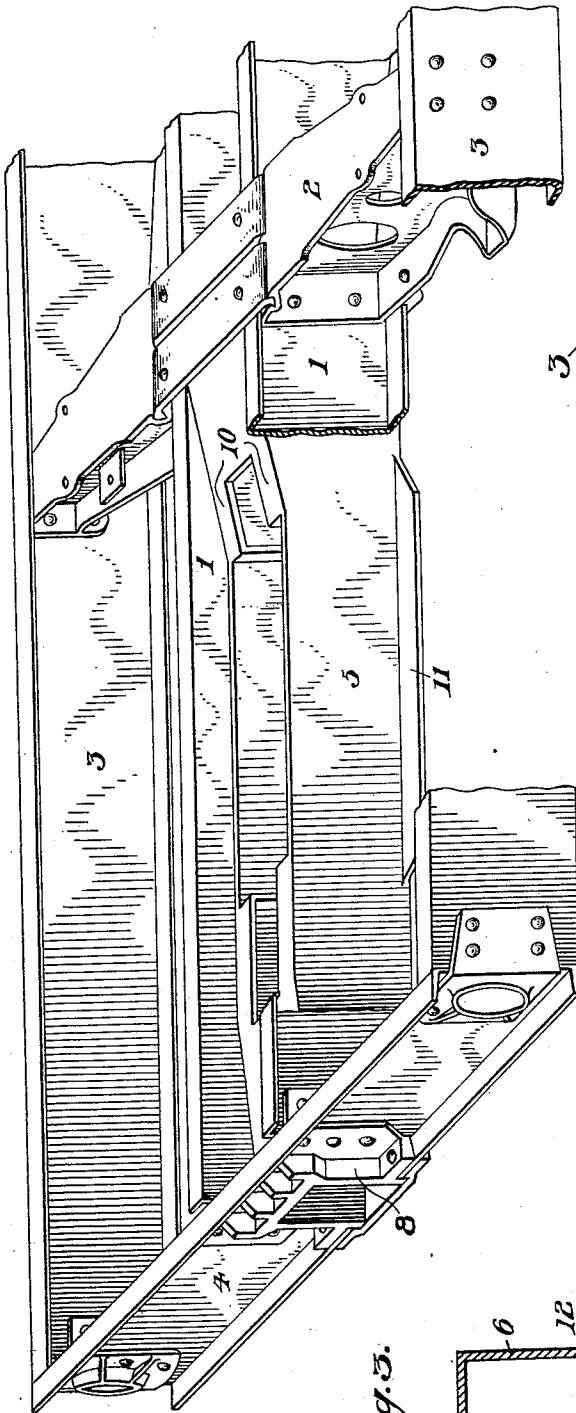


Fig. 2.

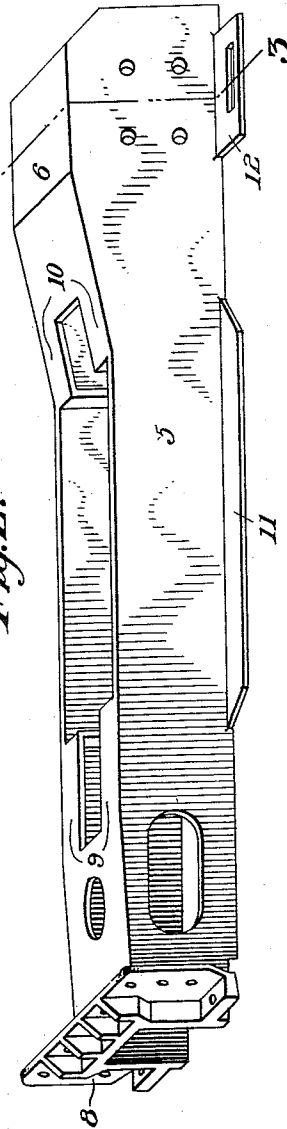
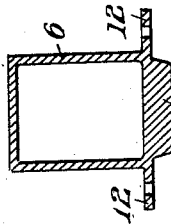


Fig. 3.



witnesses:

J. P. [Signature]  
Mr. [Signature]

Inventor  
Oswald S. Pulliam  
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Attorney

# UNITED STATES PATENT OFFICE.

OSWALD S. PULLIAM, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO PITTSBURGH EQUIPMENT COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## CAR-BODY-UNDERFRAME CONSTRUCTION.

No. 929,245.

Specification of Letters Patent.

Patented July 27, 1909.

Application filed April 23, 1908; Serial No. 428,743.

To all whom it may concern:

Be it known that I, OSWALD S. PULLIAM, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Car-Body-Underframe Construction, of which the following is a specification.

In metal car-body underframes in which the center-sill or center-sills extend forwardly from the body-bolsters to the respective end-sills of the underframe, those portions of the center-sill or center-sills lying between the body-bolsters and the end-sills have heretofore been subjected to the buffing and draft-strains met with in operating cars, and the consequence has been that the said portions frequently buckle and cause considerable trouble.

One of the objects of the present invention is to relieve the center-sills, or sill, from the strains mentioned.

Another object of my invention is to provide a new and improved draft-carrier *per se*.

In the accompanying drawing, which illustrates an application of my invention, Figure 1 is a broken perspective view of a portion of a car-body underframe embodying my invention; Fig. 2 a perspective view of a draft-carrier; and Fig. 3 a sectional view taken on line 3—3 of Fig. 2.

Referring to the drawing, 1 designates the center-sills of the underframe, as illustrated, I have shown two center-sills in the form of channels, but a single center-sill may be employed or the sills may be of any suitable shape. A body-bolster 2 is located between and secured to side-sills 3.

4 designates an end-sill of the underframe. This sill is provided with a centrally disposed opening adapted to receive the outer end of draft-carrier 5.

The draft-carrier constitutes a characteristic and important feature of the present invention.

As shown, the draft-carrier is located between the center-sills and extends from a body-bolster to and through an end-sill. The draft-carrier comprises an integral structure having a diaphragm or filler 6 formed on one end thereof, a center-bearing 7, and a striking-plates 8 formed on the opposite end of the carrier proper.

The carrier is formed to receive the draft-gear or draft-rigging of the car and is pro-

vided with draft-lugs or engaging-members 9 and 10, which lugs are adapted to engage the draft-rigging when it is placed in position.

The center-sills extend through the body-bolsters and project forwardly thereof to the end-sills. Heretofore, it has been the practice to provide the center-sills with draft-lugs or members arranged to engage the draft-gear of a car; in my construction I dispense with the draft-lugs on the center-sills and provide a construction in which the draft-lugs or engaging-members for the draft-gear are carried by the draft-carrier.

In my form of underframe the draft-gear is carried by the draft-carrier free of the center-sills. By this construction, the buffing and draft-strains are received by the draft-carrier and transmitted through the body-bolsters, thereby relieving those portions of the center-sills located between the body-bolsters and the end-sills from the strains to which they have heretofore been subjected. In addition to the parts mentioned above the draft-carrier is also formed with side-edges 11 and 12 adapted to engage the center-sills.

What I claim is:

1. In a car-body underframe, the combination with a separable body-bolster, center-sills and end-sill, of a separable draft-carrier comprising an integral metallic structure located between the center-sills and extending from the body-bolster to and through the end-sill.

2. In a car-body underframe the combination with a center-sill, of an end-sill having a draft-carrier receiving-opening and a separable draft-carrier comprising an integral metallic structure having an end extending through the opening and formed with means for engaging a draft-gear.

3. In a car-body underframe the combination with a center-sill and an end-sill having a central opening, of a draft-carrier formed with a striking-plate, said carrier extending through the opening of the end-sill.

4. A separable draft-carrier having a diaphragm or filler, a center-bearing, and a striking-plate all comprising a single integral metal structure.

5. A separable draft-carrier comprising an integral metal structure having a diaphragm or filler formed thereon at one end and a striking-plate on its opposite end.

6. A separable metallic draft-carrier having a striking-plate formed integral therewith at one end and an enlarged portion at its other end constituting a body-bolster filler and center-bearing.

7. In a car-body underframe the combination with center sills of channel form, of a draft-carrier located between the center-sills and provided with outwardly extending ledges adapted to engage the center-sills.

8. In a car-body underframe the combination with a separable body-bolster, an end-sill, center-sills extending from the body-bolster and forwardly to the end-sill, a separable draft-carrier comprising an integral structure located between the center-sills and extending from the body-bolster to and through the end-sill, said carrier formed with a striking plate at one end and with an enlarged por-

tion at its opposite end constituting a body-bolster filler and a center-bearing, said carrier adapted to receive a draft-gear and provided with means for engaging draft-gear.

9. In a car-body underframe the combination with a body-bolster, an end-sill, center-sills extending through the body-bolster and forwardly to the end-sill, a draft-carrier formed with means for engaging a draft-gear, said draft-carrier located between the center-sills and extending from the body-bolster to and through the end-sill.

In testimony whereof I affix my signature in presence of two witnesses.

OSWALD S. PULLIAM.

Witnesses:

A. C. WAY,

W. G. DOOLITTLE.