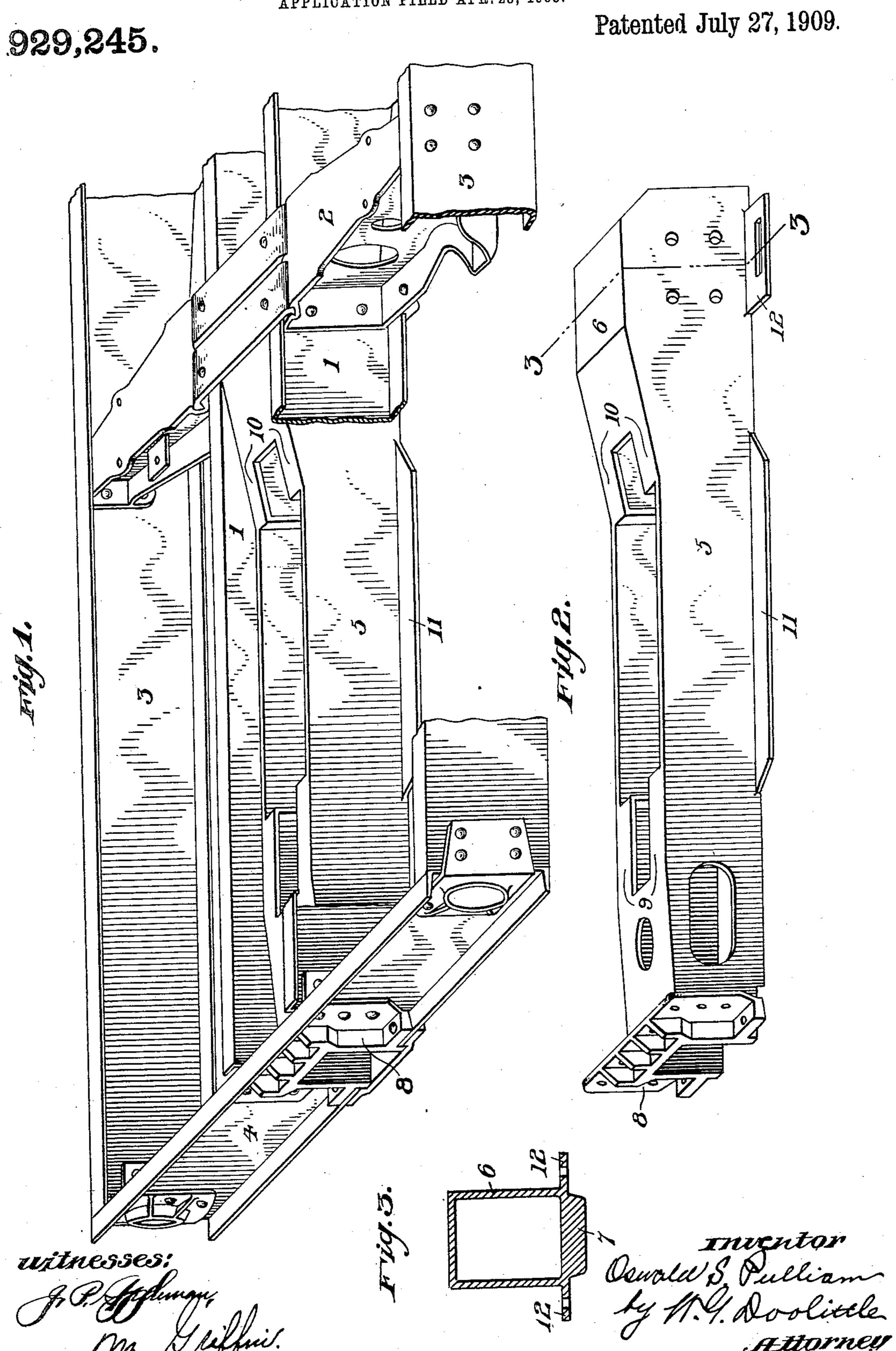
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CAR BODY UNDERFRAME CONSTRUCTION.

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## UNITED STATES PATENT OFFICE.

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## CAR-BODY-UNDERFRAME CONSTRUCTION.

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To all whom it may concern:

of Pittsburg, in the county of Allegheny and | draft-rigging when it is placed in position. State of Pennsylvania, have invented certain | The center-sills extend through the body-5 new and useful Improvements in Car-Body- bolsters and project forwardly thereof to the Underframe Construction, of which the fol- end-sills. Heretofore, it has been the prac- 60 lowing is a specification.

In metal car-body underframes in which the center-sill or center-sills extend for-10 wardly 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 15 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 inven-20 tion 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 illus-25 trates 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 draftcarrier; and Fig. 3 a sectional view taken on 30 line 3—3 of Fig. 2.

Referring to the drawing, I 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 em-35 ployed 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 40 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 50 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 draftgear or draft-rigging of the car and is pro-1 striking-plate on its opposite end.

wided with draft-lugs or engaging-members 9 55 Be it known that I, Osward S. Purliam, and 10, which lugs are adapted to engage the

tice to provide the center-sills with draft-lugs or members arranged to engage the draftgear of a car; in my construction I dispense with the draft-lugs on the center-sills and provide a construction in which the draft- 65 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 centersills. By this construction, the buffing and 70 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 75 which they have heretofore been subjected. In addition to the parts mentioned above the draft-carrier is also formed with sideledges 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, centersills and end-sill, of a separable draft-carrier comprising an integral metallic structure lo- 85 cated 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 90 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 105 integral metal structure having a diaphragm or filler formed thereon at one end and a

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- 20 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-25 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 30 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.