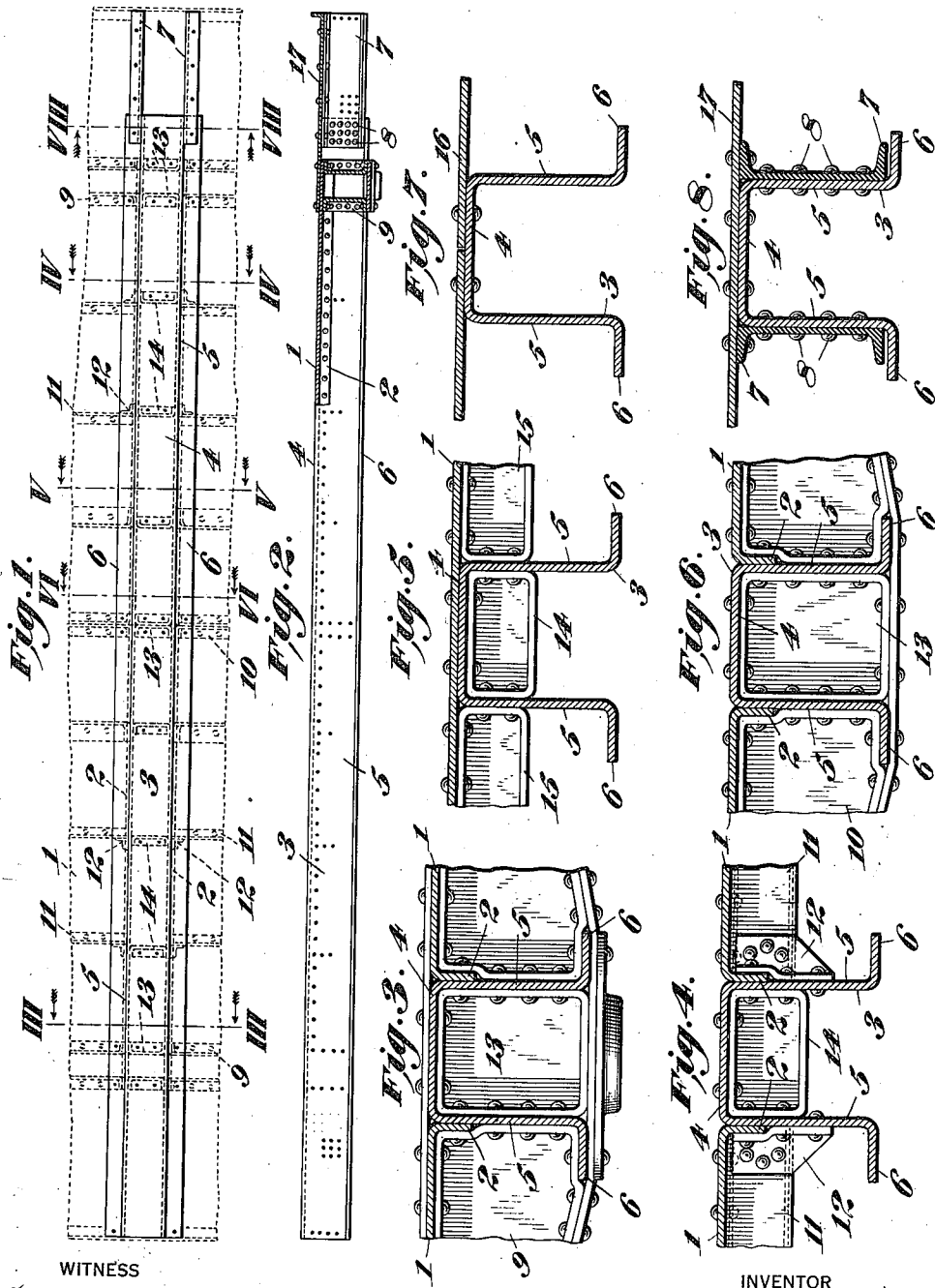


1,279,600.

Patented Sept. 24, 1918.



WITNESS

Elmer Leavey.

BY

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UNITED STATES PATENT OFFICE.

EDWIN E. SLICK, OF WESTMONT BOROUGH, PENNSYLVANIA.

CENTER SILL FOR CARS.

1,279,600.

Specification of Letters Patent. Patented Sept. 24, 1918.

Application filed November 6, 1916. Serial No. 129,649.

To all whom it may concern:

Be it known that I, EDWIN E. SLICK, a citizen of the United States, and a resident of the borough of Westmont, county of Cambria, and State of Pennsylvania, (whose post-office address is Johnstown, Pennsylvania,) have invented certain new and useful Improvements in Center Sills for Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improved form of center sill for cars which consists essentially of an inverted trough section which may be of pressed or rolled steel, with integral flanges extending outwardly from the lower edges thereof. The floor plates may be attached to the upper part of the inverted trough section by means of rivets, or otherwise, or my center sill may be used in connection with composite or wooden cars, or in fact may be used in connection with any kind of railroad cars as may be desired.

My center sill may extend through the bolsters and project about two feet or so therefrom toward the end of the car and may have draft sills of channel or other shape, secured to the webs of my center sill and spaced apart at a proper distance, or, on account of the open construction of the lower central portion of my center sill, this section may be used directly as draft sills, in which case my center sill would extend from end to end of the car.

Referring now to the annexed sheet of drawings which form a part of this specification:—Figure 1 is a plan view of a car embodying my improved center sill showing a portion of the car underframe in dotted lines; Fig. 2 is a side elevation of my center sill showing a portion of the floor plate and the bolster secured thereto; Fig. 3 is a vertical transverse sectional elevation near the bolster on the left hand side of Fig. 1, taken on the line III—III thereof; Fig. 4 is a transverse sectional elevation near one of the intermediate cross bearers taken on the line IV—IV of Fig. 1; Fig. 5 is a vertical transverse sectional elevation near another one of the intermediate cross bearers taken on the line V—V of Fig. 1 and showing the floor plate extending over the center sill; Fig. 6 is a vertical transverse sectional elevation near the center of the car taken on

the line VI—VI of Fig. 1; Fig. 7 is a vertical transverse sectional elevation of my improved center sill showing the central meeting edges of floor attached to the top of the center sill; and Fig. 8 is a vertical transverse section on the line VIII—VIII of Fig. 1.

As illustrated on the left hand side of Fig. 1, my improved center sill runs to the end of the car and by reason of its construction is also adapted to serve as draft sills, whereas at the right hand end of Fig. 1, separate draft sills are shown attached to the webs of the center sill, which center sill in this case, only extends part way from the bolster to the end of the car.

Referring now to the characters of reference on the drawings:—1 is the car floor illustrated as of metal, but I wish it understood that my car sill is equally applicable to wooden, composite or other types of construction. As illustrated in Fig. 3, the floor plates are downwardly flanged at their edges 2 and attached to the webs of the center sills by means of said flanges. 3 represents my center sill in general, 4 is the upper flange or upper part thereof, 5 are the side or web portions and 6 are the lower outwardly projecting flanges formed integral with the center sill, as illustrated. Separate draft sills are indicated at 7, and 8 are the rivets connecting these draft sills to my center sill, the bolsters as illustrated at 9, the central cross bearers are 10, the intermediate cross bearers, shown as channels, are 11, brackets connecting the intermediate channel cross bearers to the center sill are 12, diaphragms within the bolsters and at the center of the car are 13, these being composed of shallow pan-shaped diaphragms having a web and a flange extending continuously around all the edges thereof; 14 are similar but smaller diaphragms within the center sills between the ends of the intermediate cross bearers, 15 are pressed steel or pan-shaped cross bearers with marginal flanges extending around the edges thereof. As shown in Fig. 7, the floor plates are illustrated as 16, these being flat and secured directly to the top or upper flange member 4 of the car sill by means of rivets passing therethrough. The floor plates at the ends of the car are illustrated as 17.

Although I have described and illustrated my invention in considerable detail, I do not wish to be limited to the exact and

specific details thereof, as shown and described, but may use such modifications in, substitutions for, or equivalents thereof, as are embraced within the scope of my invention or as pointed out in the claims.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:—

1. A car sill of substantially uniform inverted trough section with integral marginal flanges extending outwardly from the lower edges thereof and floor plates attached to the upper portion of said sill.

2. A car sill comprising an inverted trough of uniform section, integral flanges projecting outwardly from the lower edges thereof, the upper flange portion of said trough be-

ing secured to the floor plates and the side portions to the bolsters and cross diaphragms.

3. A car sill comprising an inverted trough section with integral flanges extending outwardly from the lower edges thereof, said car sill extending throughout the length of the car from end to end thereof of uniform size, and means for securing same to the underframing, the ends thereof being open from below and adapted to directly receive a draft rigging, and floor plates provided with flanged edge portions secured to the sides of the center sill.

In witness whereof I hereunto affix my signature.

EDWIN E. SLICK.