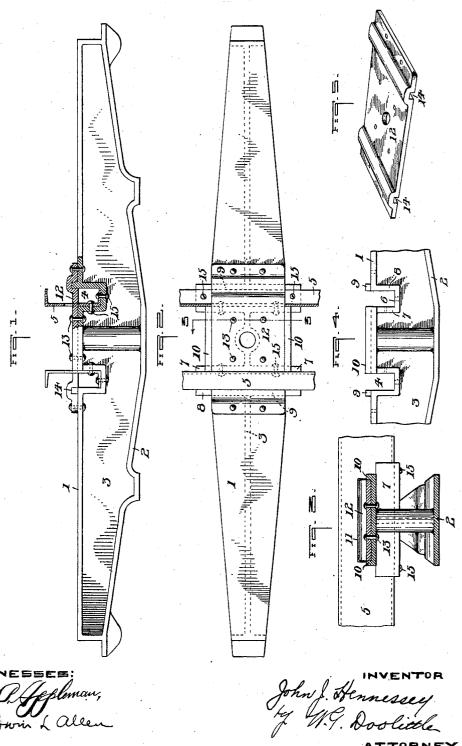
## J. J. HENNESSEY. CAR FRAME CONSTRUCTION. APPLICATION FILED JUNE 4, 1907.



## UNITED STATES PATENT OFFICE.

JOHN J. HENNESSEY, OF MILWAUKEE, WISCONSIN.

## CAR-FRAME CONSTRUCTION.

No. 876,644.

Specification of Letters Patent.

Patented Jan. 14, 1908.

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To all whom it may concern:

Be it known that I, John J. Hennessey, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Car-Frame Construction, of which the following is a specification.

My invention relates to a new and improved car-frame construction and more par-10 ticularly to the center-sills and body-bolsters entering into said construction and the man-

ner of connecting said parts.

The prime object of the present invention is to provide a simple and efficient construc-15 tion in which the body-bolsters and centersills may be readily assembled and in which the parts and especially the tension-member of the bolster are made sufficiently strong to withstand the strains to which they are

20 subjected in service.

In the accompanying drawing, which illustrates an application of my invention, Figure 1, is a part side elevational and a part sectional view of a car-frame construction embodying my invention; Fig. 2, a plan, partly in section; Fig. 3, a transverse section taken on line 3—3 of Fig. 2; Fig. 4, a broken elevational view of the central portion of the body-bolster; and Fig. 5 a per-30 spective view of the bolster reinforcing plate.

As illustrated and as preferred, the bodybolster is made of cast-steel and comprises a tension-member 1, a compression-member 2,

and a connecting web 3.

Located centrally of the bolster and extending downwardly through the tensionmember are two transverse separated recesses or pockets 4, adapted to receive the center-sills 5. These recesses are each bounded by a bearing-member or seat 6 and side extensions 7 and 8 all projecting laterally from the web 3 of the bolster and, as shown, they extend for a slight distance beyond the tension-member.

9 designate upwardly projecting and transversely extending flanges each formed on one side of and adjacent to a recess. The tension-member is further provided with two longitudinally disposed flanges 10 extending

50 from one recess to the other.

The center-sills, as illustrated, are of channel form, other suitable forms, however, may be employed, and are provided with slots or openings 11 through which a bolster width as the tension-member of the bolster and when in position rests between the flanges 10 and bridges the spaces or cutaway portions of the tension-member. By this 60 construction I replace the metal taken from the tension-member in forming the recesses and provide a continuous strong tension-member. The bolster reinforcing plate is secured to the tension-member by means of 65 rivets 13 and is formed with channels or grooves 14 each adapted to receive one of the transversely extending flanges 9.

After the parts are assembled the respective center-sills are preferably secured to the 70 seat 6 and to the side extensions 7 by means of rivets 15, as clearly shown by the drawings.

What I claim is:

1. In a car-frame construction, the combination with center-sills having slots formed 75 therein, of a body-bolster having separated recesses or pockets to receive the center-sills, and a plate having a laterally extending groove, said plate extending across the recesses and through the center-sills, and a 80 transversely extending flange on the bodybolster adapted to fit into the groove of said

2. In a car frame construction, the combination with a pair of center-sills each hav- 85 ing a slot formed therein, of a body-bolster having disunited recesses to receive the center-sills and formed with an upwardly projecting flange adjacent to a wall of each recess, and a plate formed with grooves 90 adapted to receive the said flanges, said plate attached to the bolster and extending across the recess and through the center-sills.

3. In a car-frame construction, the combination with centre-sills having slots formed 95 therein, of a body-bolster comprising a tension-member, a compression-member and a web joining said members, said tension-member having disunited cut away portions to receive the center-sills, an integral webportion located between the cut away-portions, and a plate for replacing the cut away portions attached to the tension-member and extending through the slots of the centersills.

4. In a car-frame construction, the combination with center-sills provided with slots, of a body-bolster having separated recesses to receive the center-sills, an integral web-portion located between the recesses, 110 55 reinforcing plate or member 12 is passed. longitudinally extending flanges 10 project-Plate 12 is preferably of about the same ing from the tension-member of the bolster,

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a reinforcing plate located between the said flanges and extending across the recesses and through the slots of the center-sills, and means for securing the plate to the tension-5 member.

5. In a car frame construction, the combination with center-sills having slots formed therein, of a body-bolster having separated recesses to receive the center-sills, upwardly 10 projecting flanges adjacent to each recess, longitudinally extending flanges, and a plate bridging the recesses and extending through the center-sills, said plate located between the longitudinally extending flanges and 15 formed with means for engaging the upwardly projecting flanges.

6. In a car-frame construction, the combination with a center-sill having a slot formed therein, of a body-bolster having a 20 recess or pocket to receive the center-sill, a plate provided with a laterally extending

groove, said plate extending across the recess and through the center-sill, and a transversely extending flange on the body-bolster adapted to fit into the groove of said plate.

7. In a car-frame construction, the combination with a center-sill having slots formed therein, of a body-bolster having separated recesses or pockets to receive the center-sill and an integral web-portion between the recesses or pockets, and a plate attached to the tension-member of the bolster, said plate extending across the recesses or pockets and through the slots of the center-sill.

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

JOHN J. HENNESSEY.

Witnesses: James E. Mehan, Philip G. Hinners.