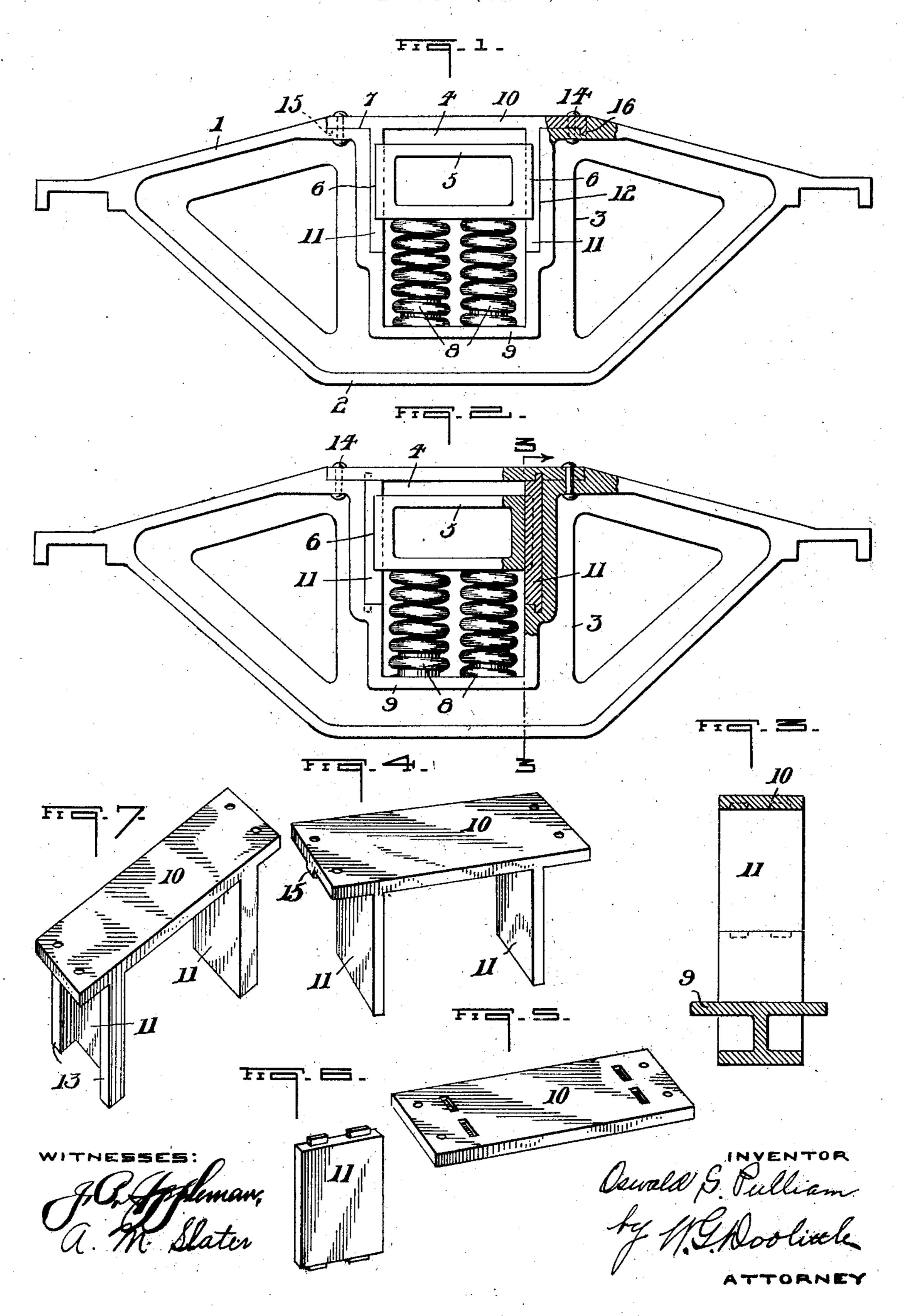
O. S. PULLIAM.
SIDE FRAME CONSTRUCTION.
APPLICATION FILED JULY 16, 1907.



UNITED STATES PATENT OFFICE.

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SIDE-FRAME CONSTRUCTION.

No. 897,010.

Specification of Letters Patent.

Patented Aug. 25, 1908.

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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 cer-5 tain new and useful Improvements in Side-Frame Construction, of which the following is a specification.

This invention relates to side-frame constructions for cars and the prime objects of 10 the present invention are to provide means for readily placing a bolster in the sideframes and removing the same therefrom; and to provide a construction that will protect the side-walls of the bolster-receiving-15 opening from being worn by the bolster.

To these ends my invention consists in a new and improved side-frame construction, in the novel features of construction, and in the combination of parts all as fully herein-

20 after described and claimed.

In the accompanying drawing, which illustrates applications of my invention, Figure 1 is a side elevational view of a side-frame construction embodying my invention; Fig. 2 is 25 a part sectional view and a part side elevational view showing a modified form of my invention; Fig. 3 à sectional view taken on line 3-3 of Fig. 2; Fig. 4 a perspective view of removable top-plate and its downwardly 30 extending members; Figs. 5 and 6 detail views of plate and upright-member shown in the form of Fig. 2; and Fig. 7 a perspective view of a modified form of plate and downwardly extending members.

Referring to the drawing, the side-frames proper as illustrated and as preferred comprise a top-member 1, a bottom-member 2,

and a skeleton web-portion 3.

The side-frames are each formed with a 40 bolster-receiving-opening 4 having its upper portion at least as wide as the bolster measured over its column-guides and its lower portion contracted and of less width than the bolster measured over its column-guides, 45 said opening is adapted to receive the respective ends of a bolster 5. Bolster 5 is provided with column-guides 6.

In order to admit the bolster to its receiving-opening 4, I form the top-member 1 with 50 a cut-away portion and with ledges 7.

8 designate bolster-springs of the usual form resting upon a spring-seat 9. After the bolster is placed within the bolster-receivingopening a top-plate 10 having downwardly l

extending members 11 is placed in position 55 in the cut-away portion with its ends resting on the ledges 7 thereof and the members 11 within the bolster-receiving-opening. The downwardly extending members 11 are located in said bolster-receiving-opening 4 and 60 constitute bolster-guides adapted to make contact with the column-guides of the bolster. These members 11 are interposed between the sides of the bolster and the sidewalls 12 of the opening 4 and prevent the 65 bolster coming into contact with said sidewalls 12 or any other part of the side-frame proper.

In the drawings, I have shown several. forms of top-plates and downwardly extend- 70 ing members. In the forms of Figs. 4 and 7 the members 11 are formed integral with the top-plate 10, while in the form of Fig. 2, as particularly shown by Figs. 5 and 6, the topplate and its members 11 are made in sepa- 75 rate pieces. When made in separate pieces the plate 10 is formed with openings to receive lugs formed on the upper ends of the upright members. (See Figs. 5 and 6.) In the form of Fig. 7 the members 11 are formed 80 with flanges 13 adapted when in position to engage the edges of the side-walls 12.

As illustrated the top-plate 10 in all the forms is fitted into the cut-away portion and is secured to the ledges or bearing-mem- 85 bers 7 of the top-member 1 of the side-frame proper by means of rivets 14. The topplate bridges the opening and takes the place of the metal removed from member 1 in forming the opening.

If desired the top-plate may be provided with lugs 15 as shown in the form of Fig. 4. When these lugs are employed the top-member 1 is formed with recesses or pockets 16 to receive said lugs.

What I claim is:

1. In a side-frame construction, the combination with a bolster provided with columnguides, of a side-frame proper having its topmember cut away to admit a bolster and 100 formed with a bolster-receiving-opening having its upper portion at least as wide as the bolster measured over its column-guides and a lower contracted portion, and a top-plate having a downwardly extending member lo- 105 cated in the opening and disposed between the column-guides of the bolster.

2. In a side-frame construction, the com-

bination with a bolster provided with columnguides, of a side-frame proper formed with a bolster-receiving-opening, having its upper portion at least as wide as the bolster measured over its column-guides and a lower contracted portion, a top-member cut away to admit the bolster, said top member provided with supporting ledges, a plate bridging the opening and secured to the ledges, said plate having downwardly extending members located in the bolster-receiving-opening and engaging the side-walls of the opening.

3. In a side-frame construction, the combination with a bolster, of a side-frame proper having a bolster-receiving-opening with its upper portion at least as wide as the bolster measured over its column-guides and a lower contracted portion, and its top-member cut away to admit the bolster, a plate located in the cut-away portion of the top-member provided with downwardly extending members located in the bolster-receiving-opening and arranged between the sides of the bolster and the side-walls of the bolster-

receiving opening and engaging the side-25 walls.

4. In a side-frame construction, the combination with a bolster provided with columnguides, of a side-frame proper having a bolster-receiving-opening with its upper portion 30 at least as wide as the bolster measured over its column-guides and a lower contracted portion and its top-member cut away to admit the bolster, said top-member having supporting ledges, a plate located in the cut- 35 away portion of the top-member and constituting a continuation thereof provided with downwardly extending bolster-guides located in the bolster-receiving-opening and in contact with the column-guides of the bolster, 40 said plate supported by and secured to the ledges of the top-member.

In testimony whereof I affix my signature

in presence of two witnesses.

OSWALD S. PULLIAM.

Witnesses:

EDWIN L. ALLEN, W. G. DOOLITTLE.