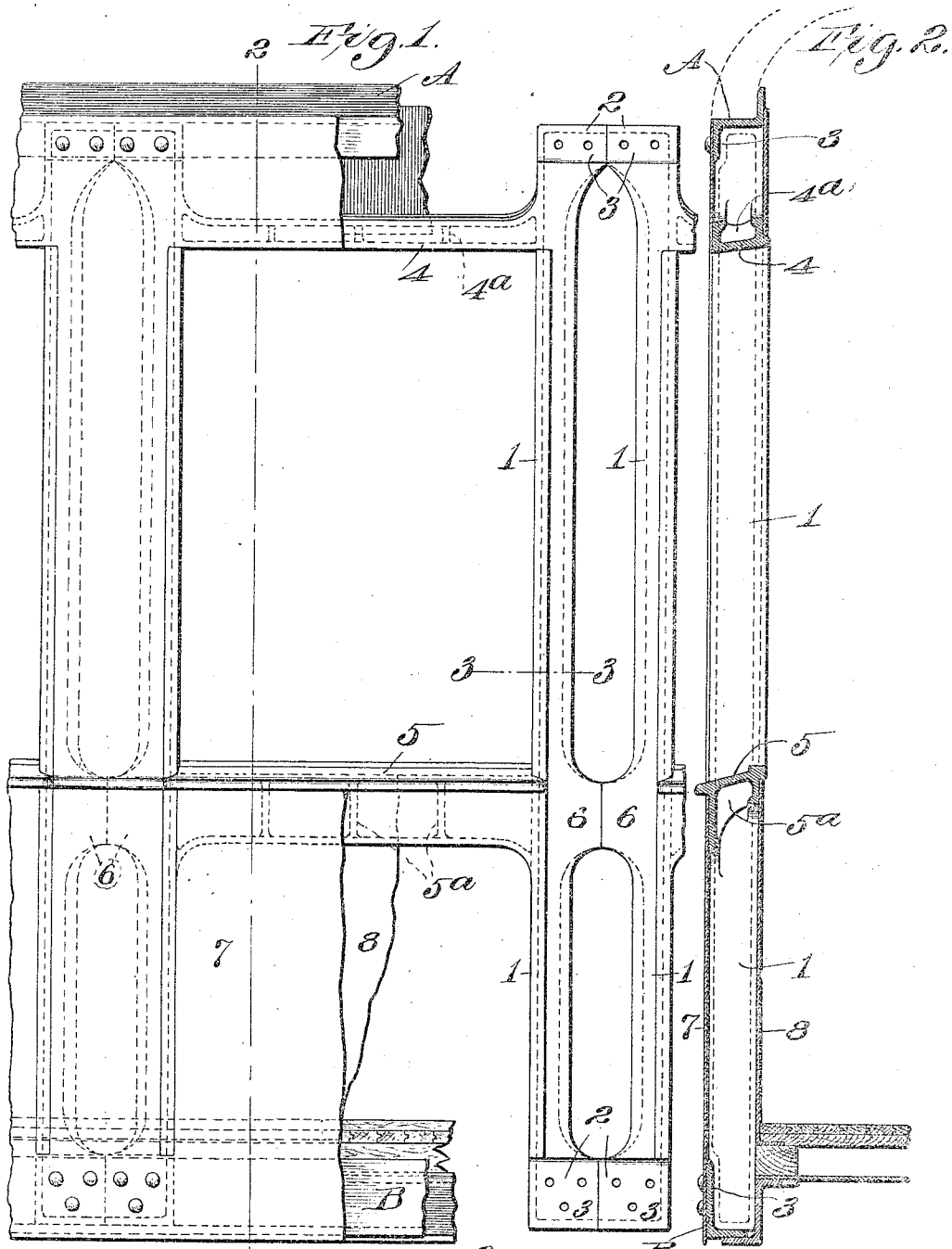


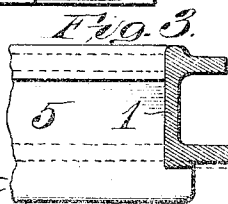
W. J. KNOX.
RAILWAY CAR SIDE FRAMING PANEL.
APPLICATION FILED MAY 6, 1912.

1,060,344.

Patented Apr. 29, 1913.



Attest:
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M. C. Ginnert



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UNITED STATES PATENT OFFICE.

WILLIAM J. KNOX, OF DUBOIS, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO COMMON-WEALTH STEEL COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF NEW JERSEY.

RAILWAY-CAR SIDE FRAMING-PANEL.

1,060,344.

Specification of Letters Patent.

Patented Apr. 29, 1913.

Application filed May 6, 1912. Serial No. 695,481.

To all whom it may concern:

Be it known that I, WILLIAM J. KNOX, a citizen of the United States, residing at Dubois, Pennsylvania, have invented a certain new and useful Improvement in Railway-Car Side Framing-Panels, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is an elevational view of a portion of the side of a car provided with my improved framing panels. Fig. 2 is a vertical section taken approximately on the line 2—2 of Fig. 1. Fig. 3 is an enlarged detail section taken approximately on the line 3—3 of Fig. 1.

This invention relates generally to railway cars, and more particularly to a cast metal section especially designed for use as a side frame panel.

The principal object of my invention is to construct a one-piece cast metal frame, comprising a pair of uprights or posts and top and bottom window rails, which frame forms a panel or section of the side framing of the car body and combines readily with the side sill and top plate and with the metal sheets forming the inside and outside sheathing of the car side wall.

By utilizing panels of my improved construction a very strong and rigid structure is produced, and much time and labor and consequent expense in the assembling or building of car bodies are saved.

To the above purposes my invention consists in certain novel features of construction and arrangement of parts hereinafter more fully described and claimed.

As shown in the drawings, my improved side frame or panel is formed in a single piece, preferably by casting, and said frame or panel comprises a pair of vertically disposed posts 1, preferably channel-shaped in cross section. The flanges forming the front and rear walls of these posts are widened at the upper and lower ends of the posts, to form bearing lugs 2, the outer faces of which engage the faces of corresponding bearing lugs formed on the next adjacent frame or panel. The faces of the outer flanges of the

ends of the posts are slightly inset, as designated by 3, in order to receive parts of the top plate A and lower chord B of the side sill.

Formed integral with the upper portions of the posts 1, preferably a short distance below the upper ends thereof, is a horizontally disposed rail 4 that is substantially U-shaped in cross section and performs the function of a lintel for the window frame.

A rail 5 is formed integral with the posts 1 a short distance below the centers thereof, which rail is preferably of inverted U-shape and forms the lower sill of the window frame.

Formed integral with the rails 4 and 5 and extending between the front and rear flanges thereof are strengthening ribs 4^a and 5^a.

Formed integral with the sides of the posts 1 in horizontal alinement with the rail 5 are outwardly projecting bearing lugs or extensions 6 that abut against corresponding lugs on the posts of the adjacent frames when the same are properly assembled.

Fixed in any suitable manner to the outer sides of the frames or panels are metal plates 7, which form the outer sheathing of the car side wall, and metal plates 8 fixed to the inner sides of the frames or panels form the inner sheathing.

Railway car side frames or panels of my improved construction can be easily and cheaply produced by reason of their being cast in one piece, and as said frames or panels can be readily combined with one another and with the top plates and side sills of a car body, much time and labor can be saved in the assembling and building up of the car side walls.

The frames or panels are preferably used in connection with continuous top plates and side sills, and in the construction of passenger cars the frames or panels are placed immediately adjacent one another, as shown in the drawing, but where used in the construction of baggage, express, mail and caboose cars the frames or panels are suitably spaced apart.

It will be readily understood that minor changes in the size, form and construction of the various parts of my improved framing panel can be made and substituted for those herein shown and described without

departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim:

5 1. As a new article of manufacture, a cast metal car side framing panel constructed in one piece, and comprising a pair of channel-shaped uprights and a pair of horizontally disposed channel-shaped rails
10 spaced apart so as to form the lintel and sill of a window frame.

2. The herein described car side framing panel comprising a pair of flanged posts, a flanged lintel between the upper ends of
15 said posts, a flanged sill between the central portions of said posts, which posts, lintel and sill are integrally connected.

3. As a new article of manufacture, a one-piece cast metal car side framing panel
20 composed of a pair of flanged posts, bearing lugs projecting outwardly from the sides of said posts, a flanged rail connecting the upper portions of said posts and forming the lintel of a window frame, and a
25 flanged rail connecting the central portions of said posts and forming a window sill.

4. A car side framing panel comprising a pair of flanged posts, a flanged window lintel between the upper portions of said
30 posts, a flanged window sill between the central portions of said posts, which posts, lintel and sill are integrally connected.

5. The herein described car framing panel comprising a pair of channel-shaped
35 posts, a channel-shaped window lintel between the upper portions of said posts, a channel-shaped sill between the central portions of said posts, all of which parts are integrally connected.

40 6. The herein described car side framing panel comprising a pair of side framing posts, outwardly projecting lugs integral with the flanges of said posts, a window lintel connecting the upper portions of said
45 posts, a window sill connecting the central portions of said posts, which posts, lintel and sill are integrally connected.

7. As a new article of manufacture, an integral car side framing panel comprising
50 posts, the ends of which are recessed and perforated so as to be connected to the top plate and side sill of the car body frame, and horizontally disposed rails integral with said posts and forming the window
55 lintel and sill.

8. The herein described one-piece cast metal car side framing panel comprising a pair of uprights, bearing lugs formed thereon, which bearing lugs are recessed and perforated, and a pair of horizontally disposed
60 rails spaced apart to form the lintel and sill of a window frame.

9. The herein described one-piece cast metal car side frame panel comprising a pair of uprights, bearing lugs on the ends
65 thereof, which bearing lugs are recessed and perforated, a pair of horizontally disposed rails spaced apart so as to form the lintel and sill of a window frame, and bearing lugs on the uprights directly opposite the
70 ends of the rail that forms the window sill.

10. The herein described one-piece cast metal car side framing panel comprising a pair of uprights, the faces of the end portions of which are inset to receive parts of
75 the top plate and side sill of the car body structure, and horizontally disposed rails connecting said uprights and forming the lintel and sill of a window frame.

11. The herein described car side framing
80 panel constructed in a single piece and comprising a pair of channel-shaped posts, outwardly projecting lugs integral with the flanges of said posts at their ends, the faces of which lugs are recessed to receive the top
85 plate and side sill of the car body frame, a channel-shaped rail integral with the central portions of the posts, and outwardly projecting lugs integral with the flanges of the posts opposite said rail.
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12. The herein described one-piece, cast metal car side framing panel comprising a pair of channel-shaped posts, a rail connecting the upper portions of said posts,
95 which rail is channel-shaped in cross section, transversely disposed reinforcing webs within said channel-shaped rail, a channel-shaped rail integral with the central portions of the posts to form a window lintel, and transversely disposed strengthening
100 webs within said last mentioned channel-shaped rail.

In testimony whereof I hereunto affix my signature in the presence of two witnesses, this 27th day of April, 1912.

WM. J. KNOX.

Witnesses:

HAL C. BELLVILLE,
FRED. W. DIECKMANN