

Nov. 29, 1949

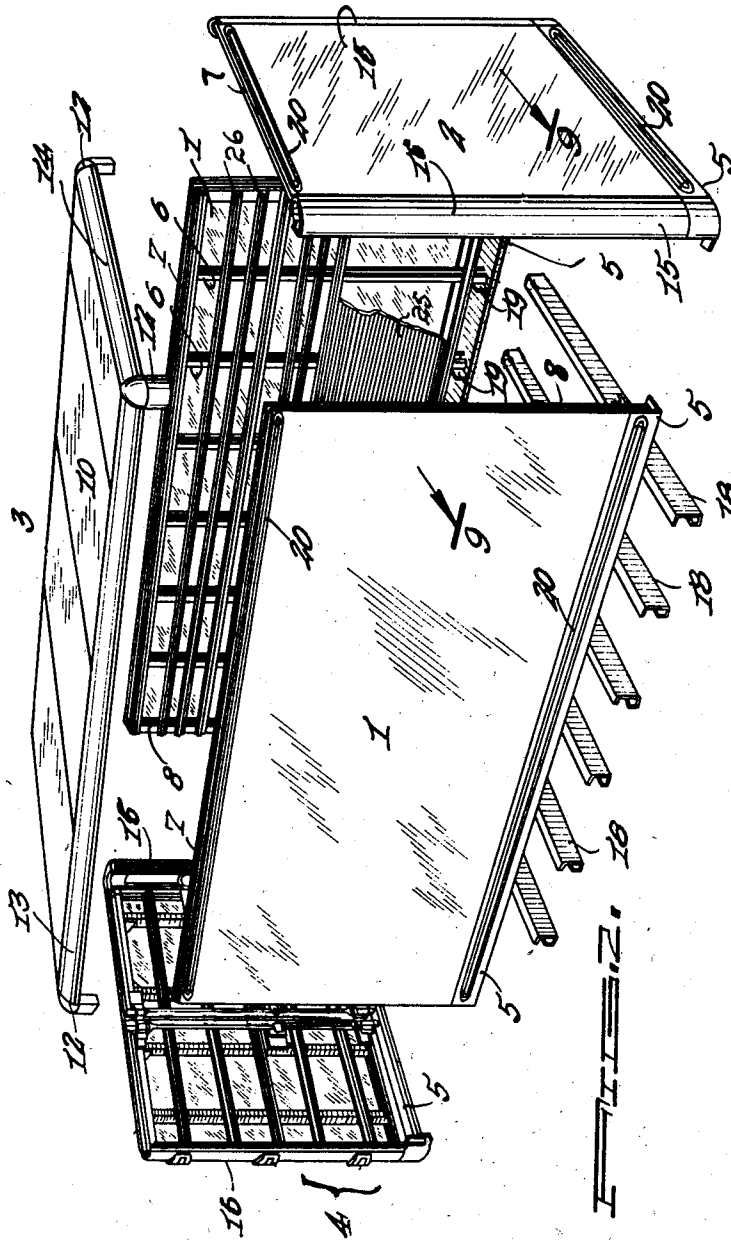
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2,489,670

BODY FOR WHEELED VEHICLES

Filed Sept. 19, 1946

4 Sheets-Sheet 2



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4 Sheets-Sheet 3

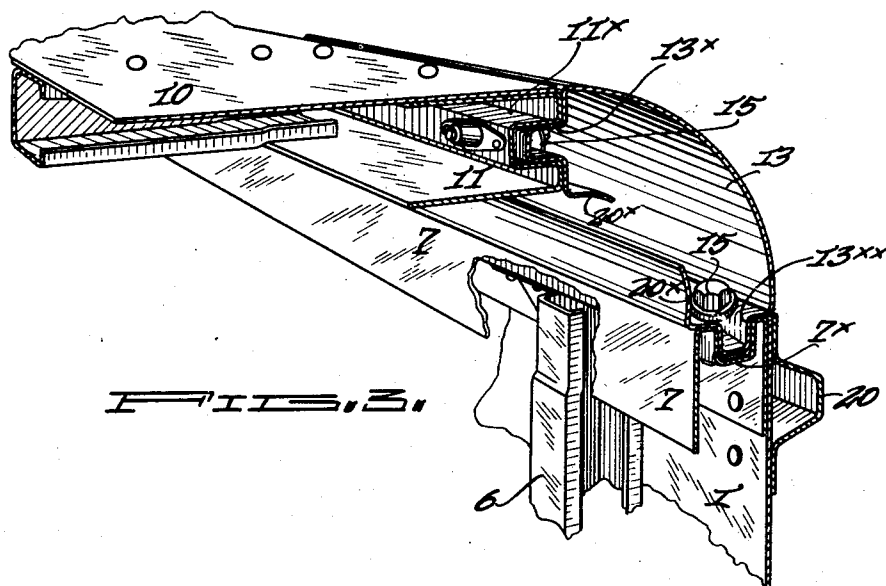


FIG. 3.

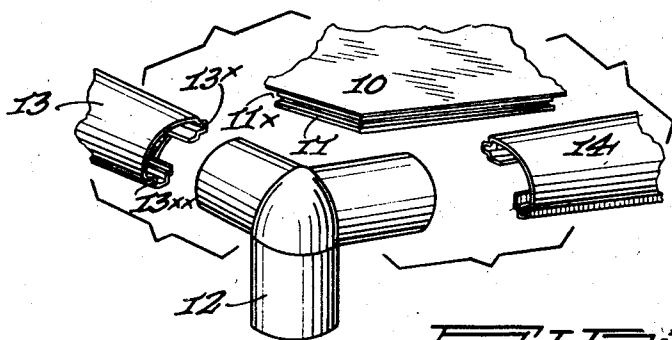


FIG. 4.

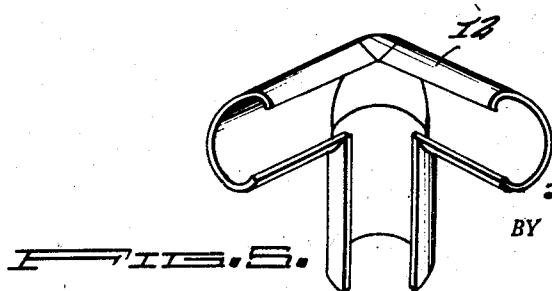


FIG. 5.

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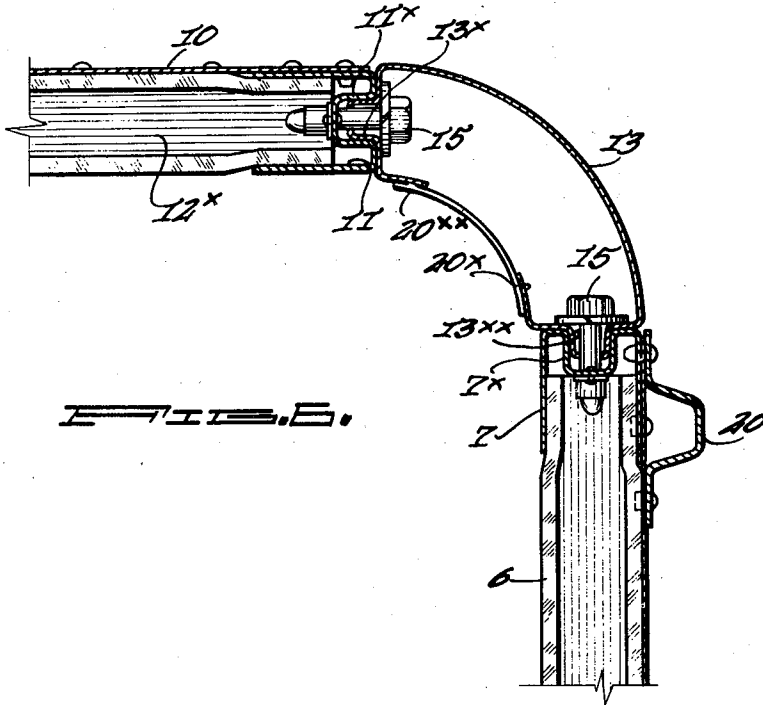


FIG. 6.

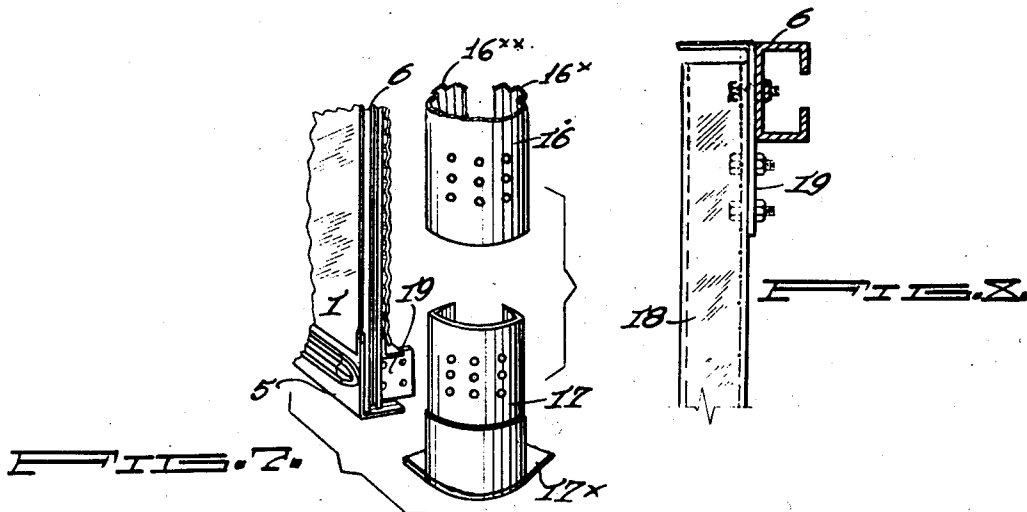


FIG. 7.

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BODY FOR WHEELED VEHICLES

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3 Claims. (Cl. 296—28)

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The object of the present invention is to provide a body construction for wheeled vehicles so formed that the entire body walls are made up of five unitary parts which can be shipped flat and very quickly assembled. The margins of the body units carry hollow metallic moldings with bolt or rivet holes, so that when the units are assembled they may be securely held by means of bolts or rivets, and corner members of special form are employed.

The invention will be described with reference to the accompanying drawings, in which:

Fig. 1 is a perspective view showing an embodiment of the invention;

Fig. 2 is a schematic view in perspective showing the units separated;

Fig. 3 is a fragmentary sectional view taken vertically along the line 3—3, Fig. 1;

Fig. 4 is a schematic view showing a portion of the top unit, a corner unit and two moldings in separated relation;

Fig. 5 is a detail perspective view showing the inner face of the corner post;

Fig. 6 is a longitudinal section taken vertically on the line 3—3, Fig. 1;

Fig. 7 is a detailed fragmentary view showing the lower portion of a panel and portions of the associated corner members, separated; and

Fig. 8 is a horizontal section through one of the vertical side wall posts showing a floor beam and the means for connecting it to the side wall post; and

Fig. 9 is a horizontal section taken generally on the line 9—9, Fig. 2, with the members connected at the corner.

Referring to the drawings, my body construction consists of side panels 1, a rear end panel 2, a top panel 3, and a door holding unit indicated generally at 4.

Each side panel 1 starts at its base with a longitudinal L-shaped frame member 5 to which are connected, as by riveting or bolting, posts 6. At their tops these posts are received within a hollow longitudinal frame 7 (Fig. 3). Frame 7 is formed at its top with a deep rabbet or channel, indicated at 7x (Fig. 3).

To the bottom and top longitudinal frame members 5 and 7 of each side panel 1 and at each end thereof is bolted, riveted, welded, or otherwise secured, a frame 8 formed with a deep rabbet at 8x (Fig. 9), and thus of the same form as the longitudinal frames 7.

These top and bottom and end frames 5, 7 and 8 carry the plate or plates which make up the outer surface of the panel 1 and which may be

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secured to the frame in any suitable manner. The vertical corner section, Fig. 6, and the horizontal corner section, Fig. 9, illustrate the arrangement.

The end panel 2 is of the same construction as the side panels 1. One of its two marginal vertical frames is shown in horizontal section at 9 in Fig. 9 and it is provided with a base horizontal frame the same as that shown at 5 for the side panels. It also is provided with a top marginal frame identical with frame 7 of Fig. 3.

The door unit 4 is made up of the same type of vertical and horizontal frame members as those for the side and end panels 1, 2; and doors 4x or gate members may be employed as desired.

The top unit, having an outer covering of metal sheet 10 is of the same general construction as the side panels 1 and end panel 2. One of its longitudinal marginal frames is shown at 11 in Fig. 6 and it will be seen that frame 11 receives and is carried by horizontal roof beams 12x which will be spaced generally in the manner of the side panel beam 6.

We now come to the members which immediately connect the panels. As shown in the embodiment illustrated in Fig. 2, said connecting members for the uppermost area of all five units may be initially carried by the top unit. Or, as indicated in Fig. 4, they may be shipped disassembled and brought together in the final assembly of the units.

The said uppermost connecting units consist of four corner members 12 of special form, two longitudinal connecting members 13, and two end connecting members 14. The corner members 12 are best shown in Figs. 4 and 5. Each consists of top channel wings extending at right angles, and a depending curved leg. The channel wings of each corner member are proportioned to receive one of the longitudinal connecting members 13 and one of the end connecting members 14.

Each longitudinal and end connecting member consists of a channel or trough formation with each of its margins bent to form a projecting rib, and an inwardly directed flange 20x. In each case the rib is proportioned to be received within the rabbet of a frame member. Thus, referring to Figs. 3 and 6, it will be seen that as to the connecting member 13, its upper rib 13x fits within the rabbet 11x of frame 11, and its lower rib 13xx fits within the rabbet 7x of frame member 7. These ribs and rabbets are preferably formed with registering apertures to receive bolts 15, Figs. 3 and 6, whereby the top and side units are held

strongly in connection, or they may be welded and riveted or bolted together.

The vertical members which immediately connect the side panels to the end panel 2 and also to the door holding unit, and which also receive the depending curved legs of the corner members 12 consist of trough-shaped members 16 (Fig. 9), each of which has its margins bent to form a rabbet and an inwardly directed flange. Thus the vertical connecting members 16 are of the same form as the horizontal connecting members 13 and 14. Referring to Fig. 9, it will be seen as to the vertical connecting member 16 therein shown, that its rib 16x fits within the rabbet 8x of vertical frame 8, and its rib 16xx fits within the rabbet 9x of vertical frame 9. These ribs and rabbets have registering apertures for bolts 15 by which the panels are rigidly held together, or they may be otherwise connected. At its top each vertical connecting member 16 receives the depending curved leg of an appropriate corner member 12. At its base each vertical connecting member 16 receives a trough-like post 17 (Fig. 7) which at its base carries a gusset plate 17x which laterally projects in such manner as to be bolted, riveted or welded to the L-shaped base frame 5 of an adjacent longitudinal panel and the adjacent end panel 2 or the door holding unit, as the case may be.

The floor of the structure may be formed in any desired manner. The horizontal sections of the L-shaped frames 5 form supporting areas for floor beams such as those shown at 18, Fig. 2. These floor beams may be laid each adjacent two opposed posts of the side panels 2. The said posts may carry connecting plates 19 preferably formed with apertures as shown in Figs. 7 and 8 to receive bolts passed through registering apertures (not shown) in the ends of the said floor beams, or the beams may be riveted or welded to the plates or directly to the panel posts. Likewise, the posts 17 may be apertured as shown in Fig. 7 to receive bolts or rivets passed through the vertical connecting members 16.

It will be seen that each connecting member is open between its inwardly directed flanges. Reference to Figs. 3 and 6 will show that this affords ready access for applying the bolts 15. Also reference to Fig. 9 will show that these open spaces may readily be closed, after the body units are connected by riveting or other forms of connection by plates 20xx onto the flanges 20x.

Rub rails 20 may be provided for the side panels 1 and end panel 2. These rails are flanged channel strips which may be welded on or riveted to the plate exteriors of the panels as shown in Figs. 3 and 6.

The panels may be lined if desired, a lining being indicated at 25, Fig. 2.

It will be understood that various modifications may be made in the form and arrangement of the elements constituting the embodiment illustrated in the drawings without departing from the spirit of the invention.

Thus, it will be understood that the channels of the reinforcing marginal frame members carried by the panels may be substituted by ribs, so that the edge faces of the tie members will have therein channels to receive said ribs, which is a reversal of the arrangement shown in the drawing. Also, the vertical tie members at the corners of the structure may be provided with any

suitable supporting base in substitution of the member 17 shown in the drawings. It will be further understood that the longitudinal tie members at the corners of the structure may be mitred and directly connected, if desired.

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

1. A truck body construction comprising a top panel having strong reinforcing frames at its side margins, side panels, each having a strong reinforcing frame at its top, and arcuate longitudinally extending tie members, each extending substantially from end to end of the top panel and side panels, the frame members and the arcuate tie members being formed with coacting interfitting ribs and channels, each tie member being box-like with an inner partially open face having at its longitudinal margins inwardly directed flanges adapted to receive a closure plate.

2. A truck body comprising in combination with an end panel and side panels, of a strong reinforcing frame at each side margin of said end panel, a strong reinforcing frame at at least one normally vertical margin of each side panel, vertically extending tie members, connecting heads for the reinforcing frame members, which frame members have opposed spaced walls joined by said connecting heads, being formed with channels and the edge faces of the tie members being formed with ribs adapted to be received within said channels, and base supports for said vertical tie members, each base support having a lower flanged section, an upper section adapted to be received within an appropriate tie member, and a shoulder intermediate said sections and serving as an abutment for the tie member.

3. In a truck body construction, side panels, each comprising a plurality of posts, outer facings carried by said posts, a strong reinforcing top frame member for each side panel and connected to its posts, a top panel comprising a plurality of beams and outer facings carried thereby, a strong reinforcing top frame member for each longitudinal margin of the top member, metallic tie members for connecting the top and side panels, the reinforcing frames and the edge faces of the tie members being formed with coacting interfitting ribs and channels, flanged base members for the side panel providing horizontal flange areas, attachment plates carried by said posts above said horizontal flange areas and adjacent thereto, and a plurality of floor supporting beams connected to said attachment plates.

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