

No. 790,037.

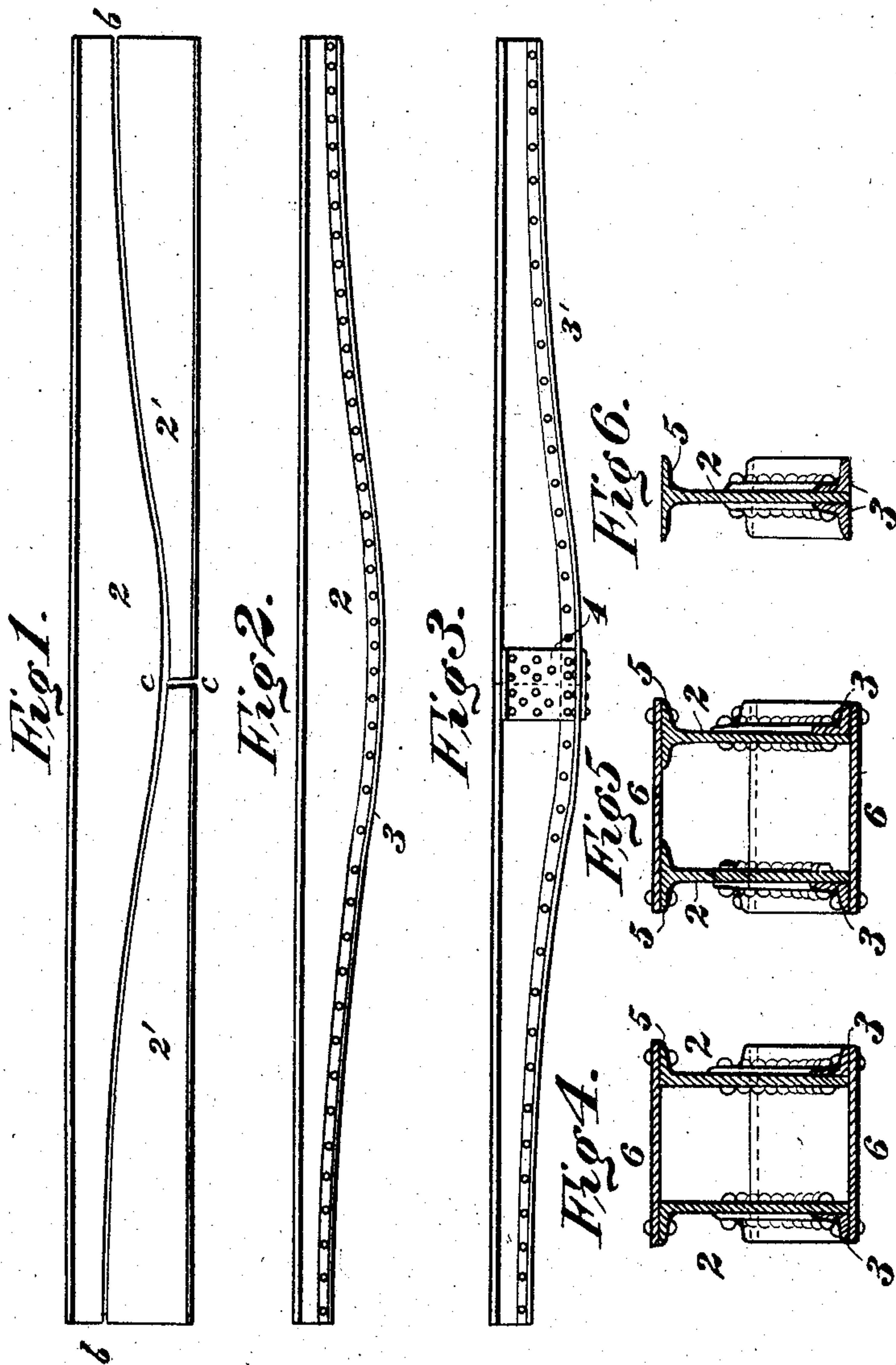
PATENTED MAY 16, 1905.

E. I. DODDS.

CAR PART.

APPLICATION FILED FEB. 26, 1904.

2 SHEETS—SHEET 1.



WITNESSES

G. M. Vein
N. M. Griffin

INVENTOR

Ethan I. Dodds

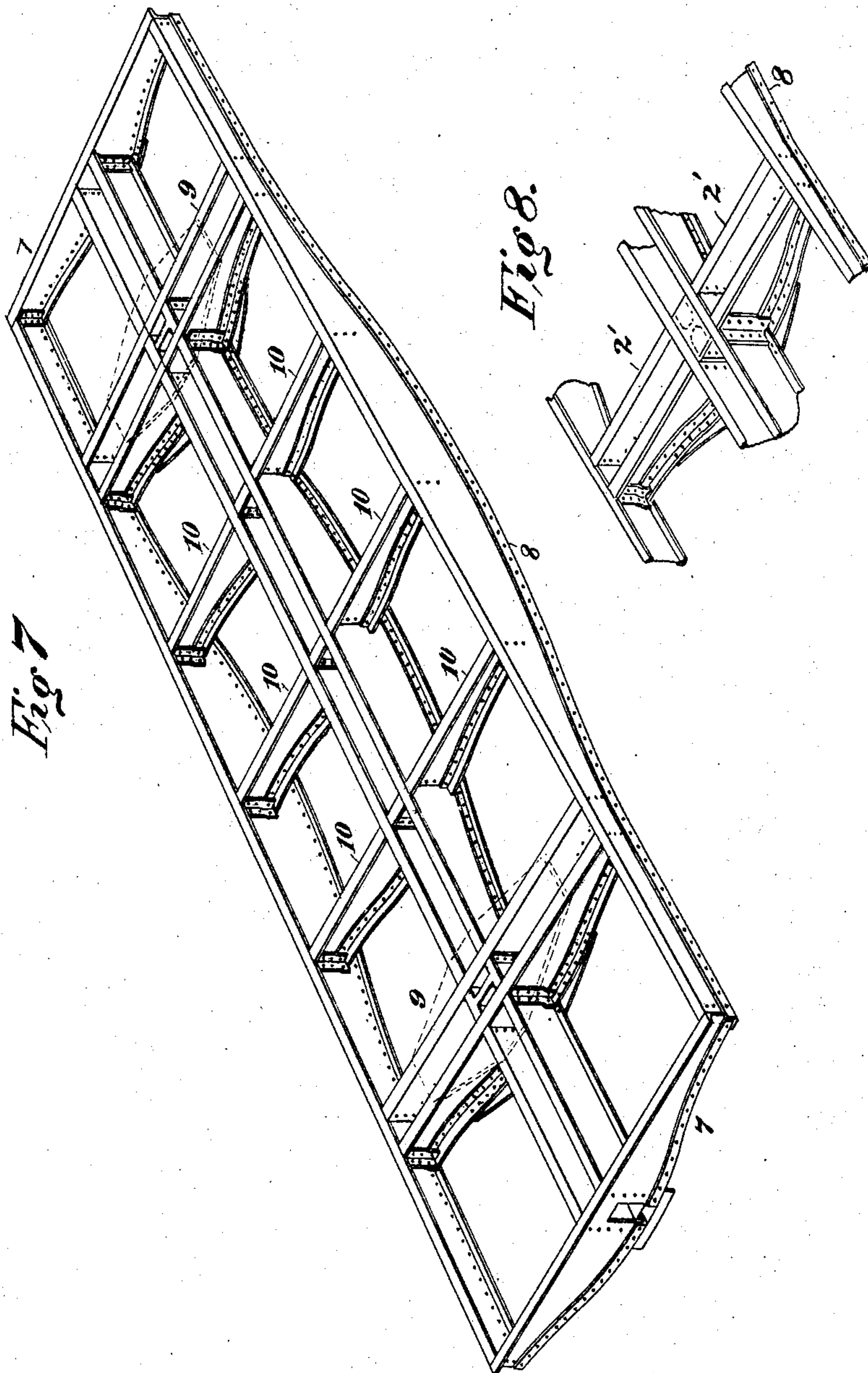
No. 790,037.

PATENTED MAY 16, 1905.

E. I. DODDS.
CAR PART.

APPLICATION FILED FEB. 26, 1904.

2 SHEETS—SHEET 2.



WITNESSES

G. M. Viers
N. M. Griffin

INVENTOR

Ethan I. Dodds

UNITED STATES PATENT OFFICE.

ETHAN I. DODDS, OF AVALON, PENNSYLVANIA, ASSIGNOR TO PRESSED STEEL CAR COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF NEW JERSEY.

CAR PART.

SPECIFICATION forming part of Letters Patent No. 790,037, dated May 16, 1905.

Application filed February 26, 1904. Serial No. 195,344.

To all whom it may concern:

Be it known that I, ETHAN I. DODDS, of Avalon, Allegheny county, Pennsylvania, have invented a new and useful Improvement
5 in Car Parts, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 shows in plan view a blank indicating how it is cut to constitute a car part
10 in accordance with my invention. Figs. 2 and 3 are car-sills made from the blank of Fig. 1. Figs. 4, 5, and 6 are cross-sections illustrating like constructions of sill. Fig. 7
15 on Sheet 2 is a perspective view of a car-frame whose sill, flying-transoms, and body-bolsters are made in accordance with my present invention; and Fig. 8 is a perspective view showing a modification.

20 The purpose of my invention is to construct car parts—such as sills, body-bolsters, and flying-transoms—of great strength and cheaply, with a minimum waste of metal.

In making a sill in accordance with my in-
25 vention I take a rolled flanged blank, as shown in Fig. 1, which may be a channel-beam or an I-beam, but is preferably a channel-beam, and cut it through the web with a cut *b b* of bowed form, thus producing two
30 pieces 2 2', which are counterparts of each other and have along the straight outer edges the original flanges of the blank, while the curved cut edges are without integral flanges. I then divide the section 2' at the middle by
35 a transverse cut *c c*, making two parts 2' 2'. The section 2 will constitute a sill, bolster, or transom according to its size, and for this purpose I provide it along the cut edge with a reinforcing angle or a flanged piece 3.
40 (Shown in Fig. 2.) I may also make a sill, bolster, or transom of the parts 2' 2', and for this purpose I place them end to end with the larger ends abutting, as in Fig. 3, connect them by tie-plates 4, and apply along
45 their cut edge a reinforcing flange or angle-piece 3'.

In Fig. 6 I show a center sill constructed as above described, the original integral flange

5 of the blank being on the upper margin and the lower curved cut edge being reinforced 50 by the attached angle-pieces 3 3.

In Fig. 4 I show a center sill made in accordance with my invention by placing two of the members 2 2 side by side in parallel position and reinforcing them along the lower 55 cut edges by the angles 3 3 and connecting them at the top and bottom with plates 6 6 or otherwise. These members 2 2 are cut from a channel-section. The integral rolled flanges 5 5 of the original blanks are at the 60 top of the sill.

In Fig. 5 I show a construction similar to Fig. 4, in which the members 2 2 are made of I-beam sections.

In Fig. 7 I show a car-frame whose end sills 65 7 7, side sills 8, body-bolsters 9, and flying-transoms 10 are made as above described, and together they constitute a cheap frame of great rigidity and strength.

Instead of making the body-bolsters and 70 transoms continuous, as shown in Fig. 7, they may be built up, as shown in Fig. 8, in which case members 2' 2' are abutted against opposite sides of the center sill.

Within the scope of my invention as de- 75 fined in the claims a skilled mechanic will be able to modify the construction in various ways, since

What I claim is—

1. A car part having along one edge an in- 80 tegral rolled flange and having its other edge a curved cut edge, having an attached angle or flanged piece along the cut edge; substantially as described.

2. A blank for a car part composed of a 85 flanged beam slit with a curved cut substantially longitudinal of its web and a transverse cut through its web and flange; substantially as described.

In testimony whereof I have hereunto set 90 my hand February 25, 1904.

ETHAN I. DODDS.

Witnesses:

GEO. B. BLEMING,
H. M. CORWIN.