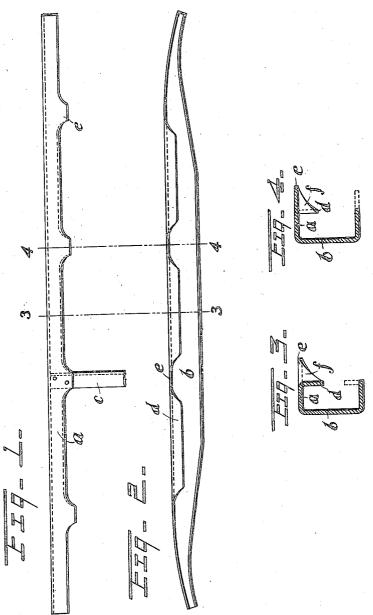
## M. W. GARTSHORE. AUTOMOBILE FRAME MEMBER. APPLICATION FILED APR. 5, 1906.



Matthew W. Gartshore.

Inventor

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Witnesses Caleb J. Rieber DMStewart

## TED STATES PATENT OFFICE.

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## AUTOMOBILE FRAME MEMBER.

No. 875,254.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed April 5, 1906. Serial No. 309,971.

To all whom it may concern:

Be it known that I, MATTHEW W. GART-SHORE, a citizen of the United States, and a resident of the city of Reading, county of 5 Berks, State of Pennsylvania, have invented certain new and useful Improvements in Automobile Frame Members, of which the following is a specification.

My invention relates particularly to frame 10 constructions for automobiles and it consists in an improved form of side members therefor, the main object of which is to secure maximum carrying strength and rigidity of transverse connection with a minimum

15 weight of material employed.

The invention is fully described in connection with the accompanying drawing illustrating a preferred embodiment thereof, and the novel features are specifically pointed

20 out in the claims.

Figure 1 is a plan view of a side member for automobile frames embodying my improvement, a portion of a transverse connecting bar or transom being shown secured 25 thereto. Fig. 2 is an inner-view longitudinal elevation of the same. Figs. 3 and 4 are cross-sectional views taken respectively on the lines 3—3 and 4—4 of Figs. 1 and 2.

My improved side-frame member is formed 30 from a suitably shaped sheet-metal blank as usual, by bending and pressing operations, the general cross-sectional form primarily imparted thereto being channel or U-shaped as indicated in Figs. 3 and 4, and one of the 35 flanges a being adapted to serve as a horizontal bearing surface extending inwardly from the vertical web portion b, the cross-sections at different points in the length of the member being varied to suit the requirements.

In order to secure greater strength and rigidity in the member itself while at the same time providing for a very simple and rigid connection of the parallel side-frame members to the transversely extending beams or transoms c, I preferably make the flanges a of considerable width, and then turn edge portions d thereof, intermediate

the web b, leaving intervening flange portions unbent and extending inwardly beyond 50 the turned-edge portions d, to form transom The inwardly projecting brackbrackets e. ets e thus forméd by the unbent portions of the flanges a enable the transom beams to be very securely riveted or connected to the 55 side-members, thereby giving great rigidity to the general frame structure as well as to the side members themselves, while the inherent rigidity of the latter intermediate of the transoms is at the same time greatly in- 60 creased by the bending of the edge portions d of the flanges as described.

As indicated in Fig. 3, the lower flange ais either left flat as indicated in full lines, or bent parallel with the web b as indicated in 65dotted lines, the latter construction however being preferable as affording increased rigidity. The curved ribbing f of the bent portions d of the flanges, into the flat bracket portions e, gives great strength to the lat- 70. ter, and permits of increased rigidity and strength in the transom connections thereto.

The preferred construction specifically shown and described may obviously be modified without departing from the spirit of 75 the invention.

What I claim is:-

1. An automobile $\operatorname{frame}$ comprising pressed-steel side members each having an inwardly extending bearing flange the edge 80 portion of which is turned approximately parallel with the vertical web at intervals and the unbent intermediate portions of which form inwardly extending transom-connecting brackets with integral ribs f, and 85 separate transom members extending between the vertical web portions of said side members and said bracket ribs and rigidly bolted to said brackets substantially as set forth.

automobile frame comprising pressed-steel side members each having a vertical web and an inwardly-extending bearing flange the edge portion of which is turn edge portions d thereof, intermediate | turned approximately parallel with the ver- 95 of the transoms, approximately parallel with | tical web at intervals and the unbent intermediate portions of which form transom-connecting brackets extending inward be-yond the turned portions, and separate members extending between the vertical web portions of said side members and rig-idly bolted to said brackets substantially as set forth.

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

## MATTHEW W. GARTSHORE.

Witnesses:
D. M. Stewart,
W. G. Stewart.