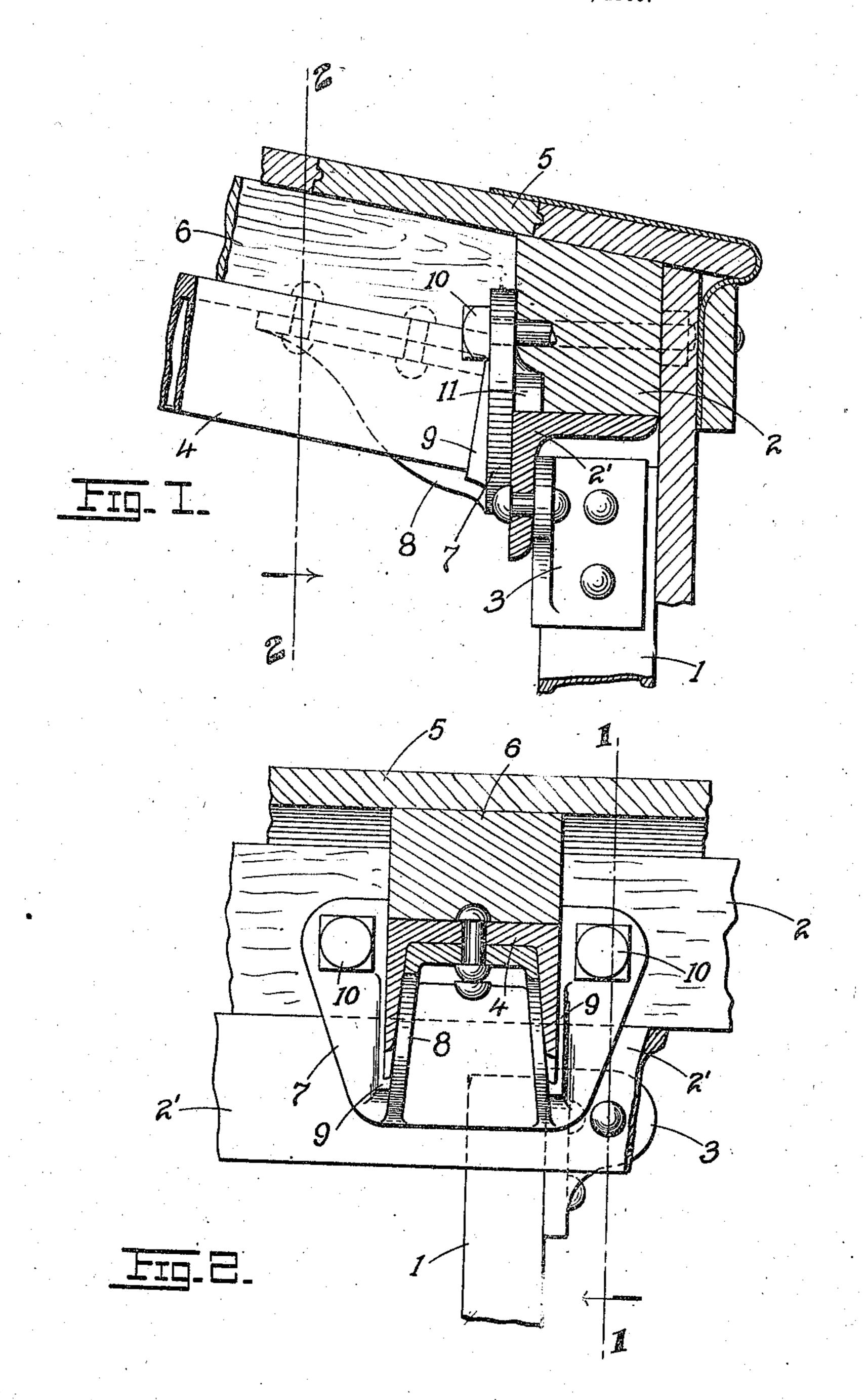
G. STEINMEYER, SR. CAR ROOF CONSTRUCTION.

APPLICATION FIEED MAR. 1, 1906.



WITNESSES:

The Heaven

INVENTOR.
Gustav Steinmeyer Sr

ATTORNEY.

## UNITED STATES PATENT OFFICE.

GUSȚAV STEINMEYER, SR., OF ST. LOUIS, MISSOURI.

## CAR-ROOF CONSTRUCTION.

No. 847,708.

Specification of Letters Patent.

Patented March 19, 190'.

Application filed March 1, 1906. Serial No. 303,722.

To all whom it may concern:

Be it known that I, GUSTAV STEINMEYER, Sr., a citizen of the United States, residing at St. Louis, State of Missouri, have invented 5 certain new and useful Improvements in Car-Roof Constructions, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in car-roof constructions; and it consists in the novel construction of roof more fully set forth in the specification and pointed out in the claim.

In the drawings, Figure 1 is a vertical transverse section on line 1 1 of Fig. 2, taken at the upper corner of a car; and Fig. 2 is a longitudinal section on line 2 2 of Fig. 1.

The present invention is specially appli-20 cable to steel cars, where a composite side plate of wood and metal is desirable for the support of the channel-bar carlines of the roof; and it has for its object to insure a rigid, durable, and yet comparatively light con-25 struction for that class of cars.

In detail the invention may be described

as follows:

Referring to the drawings, 1 represents the uprights or channel-posts of the car-body, 30 and 2 the wooden member of the composite side plate entering into the present construction. This wooden member rests on and is supported by the horizontal leg or portion of the metal member or angle-bar 2', the latter 35 being secured to the channel-posts 1 by means of angle plates or brackets 3. The carline 4 in the present instance is a channelbar having sloping terminals conforming to the pitch of the roof, and superposed over the 40 carlines and interposed between the latter and the roof-boards 5 are the rafters or fillers

6, the roof-boards having a continuous and uninterrupted support on the said rafters

and side plates.

Interposed between the ends of the carlines 45 and side plates are cast-metal anchor-plates. or abutments 7, provided with lateral channel wings or arms 8, which enter the channels of the carlines and are riveted thereto. The sides or webs of the channels of the carlines 50 have their ends cut at right angles to their longitudinal edges, said ends bearing against the inclined ridges 9, formed on the anchors 7. The thrust due to the strains is thus transmitted at right angles from the carlines 55 to their anchors or abutments, the inclinations of the ridges 9 with the faces of the anchors 7 being equal to the angle of the pitch of the roof. The abutments 7 are secured by bolts 10 to the side plate member 2, 50 each abutment having cast therewith on the face adjacent to the side plate a suitable boss or stud 11, which enters the timber or wooden member 2 of the composite side plate, said stud resting on the horizontal leg 65 of the angle-bar member 2' of said side plate, as shown in Fig. 1.

Having described my invention, what I

ciaim is-In a car-roof construction, a composite 70 side plate comprising a wooden member and an angle-bar member supporting the same, a carline anchor-plate secured to the wooden member and resting on the angle-bar member, and means for securing the anchor-plate 75 to the carline, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses. GUSTAV STEINMEYER, SR.

Witnesses:

EMIL STAREK, MARY D. WHITCOMB.