

J. MASKER.

CAR ROOF.

APPLICATION FILED APR. 13, 1907. RENEWED DEC. 29, 1908.

913,412.

Patented Feb. 23, 1909.

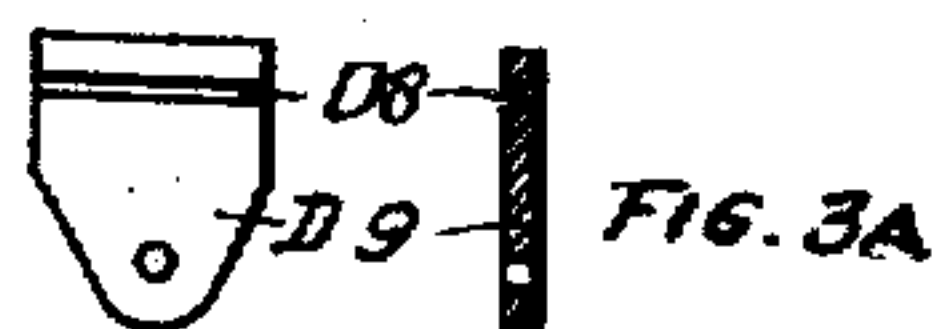
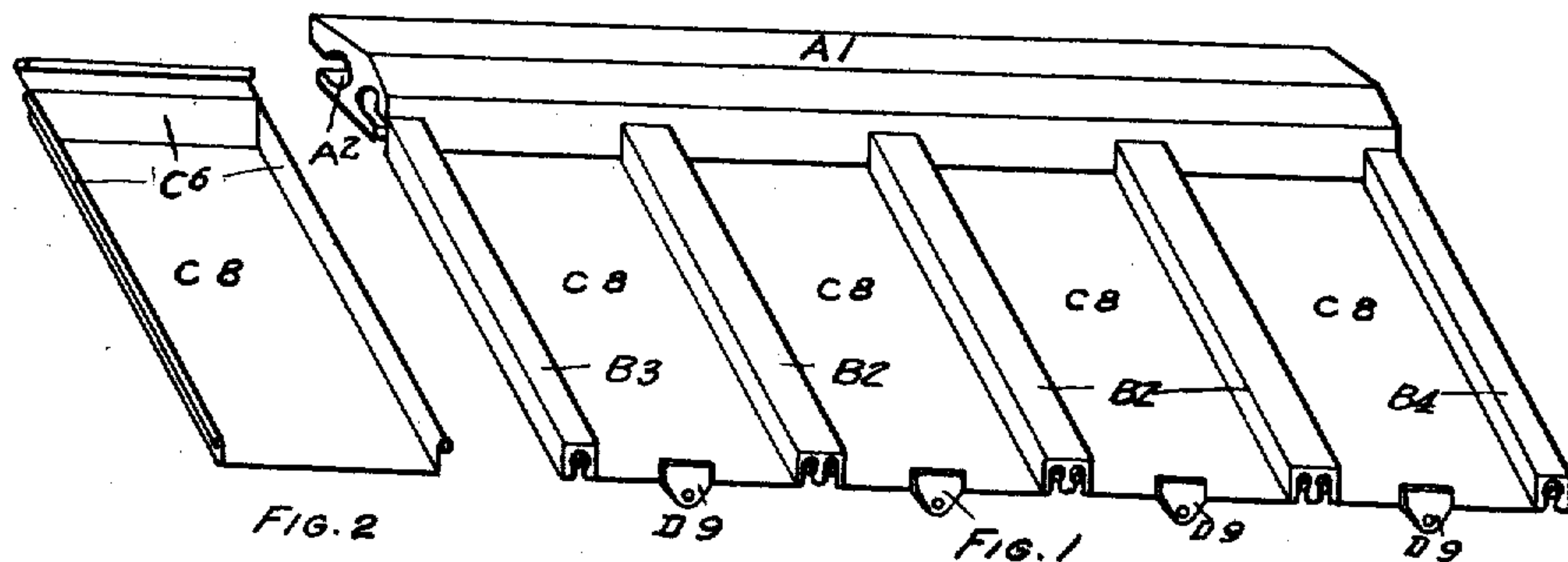


FIG. 3

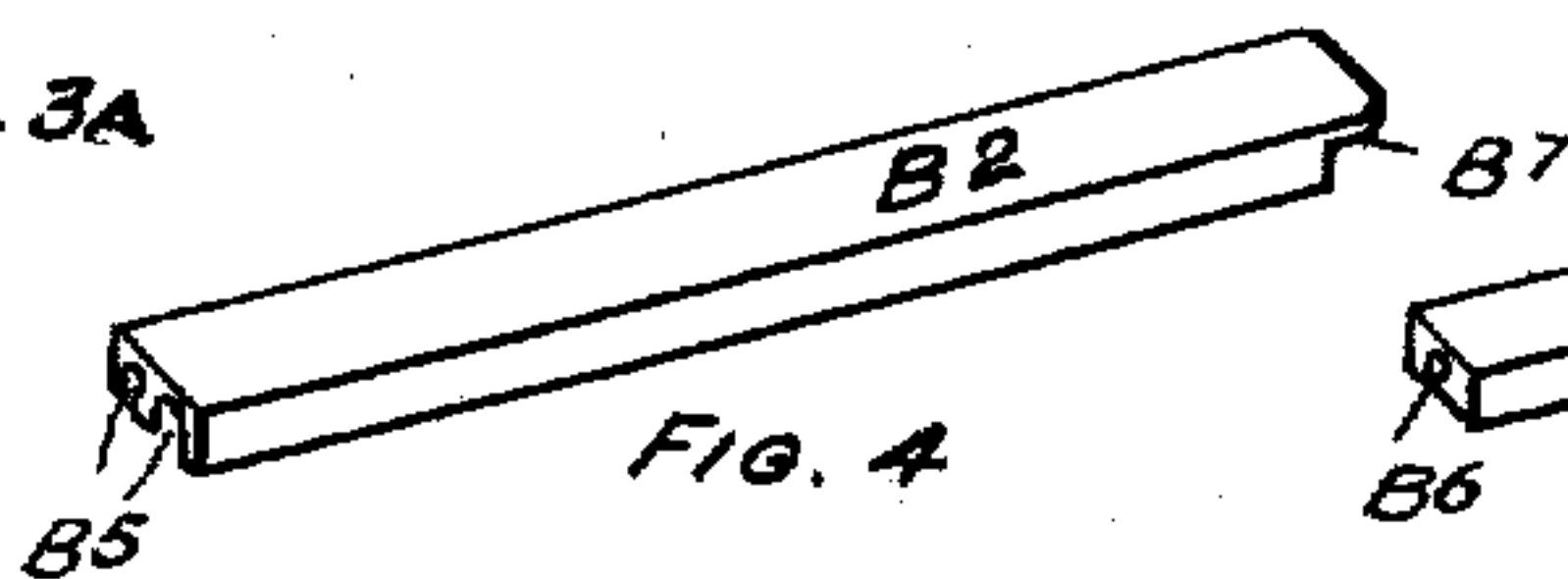


FIG. 4

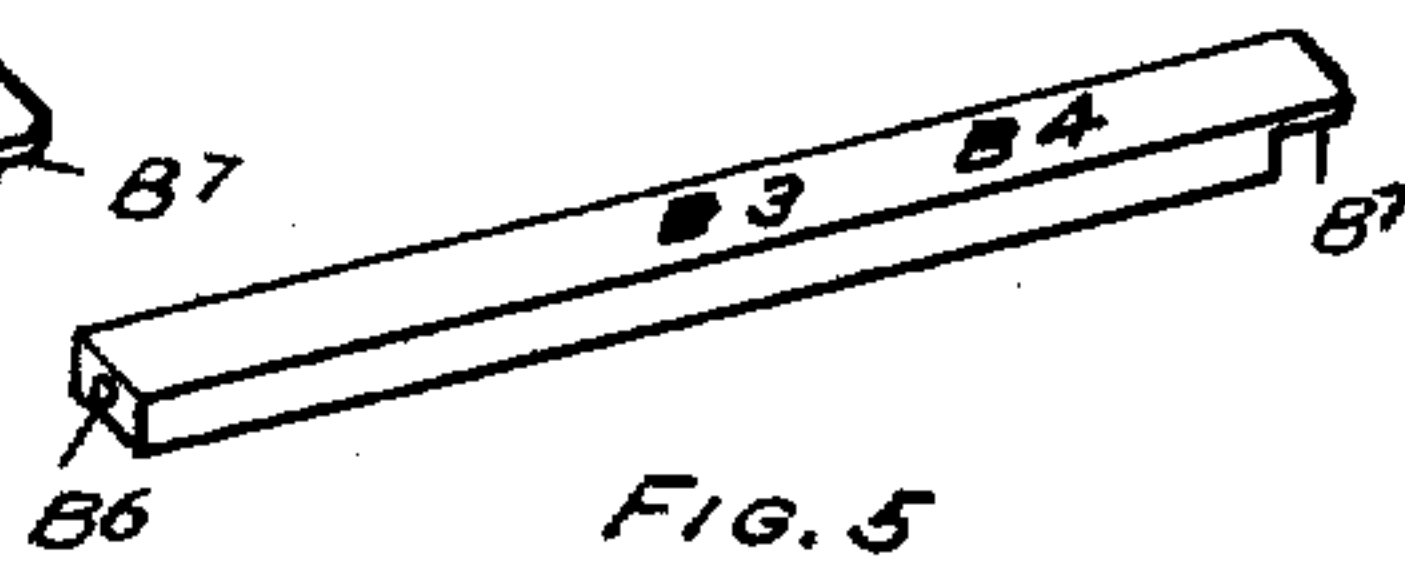


FIG. 5



FIG. 8.

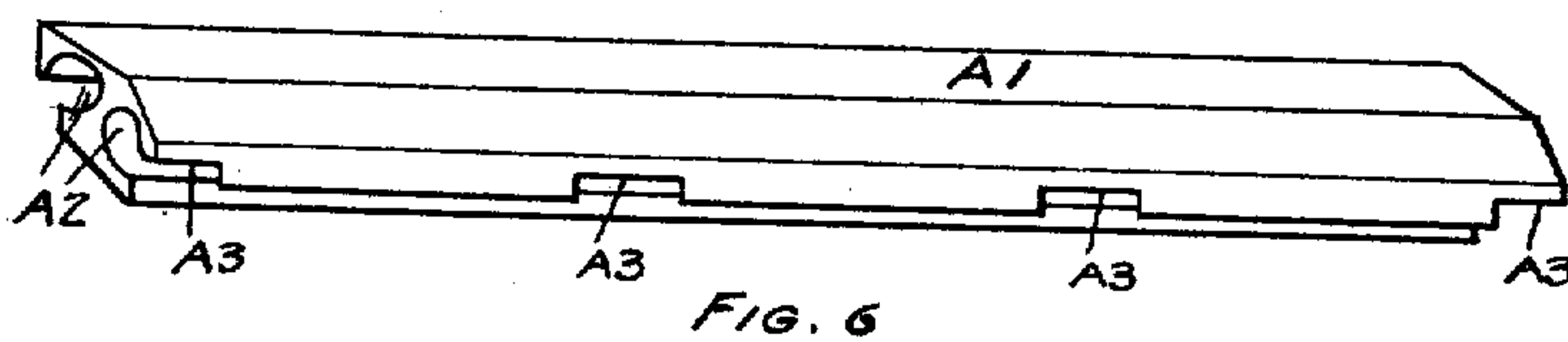


FIG. 6

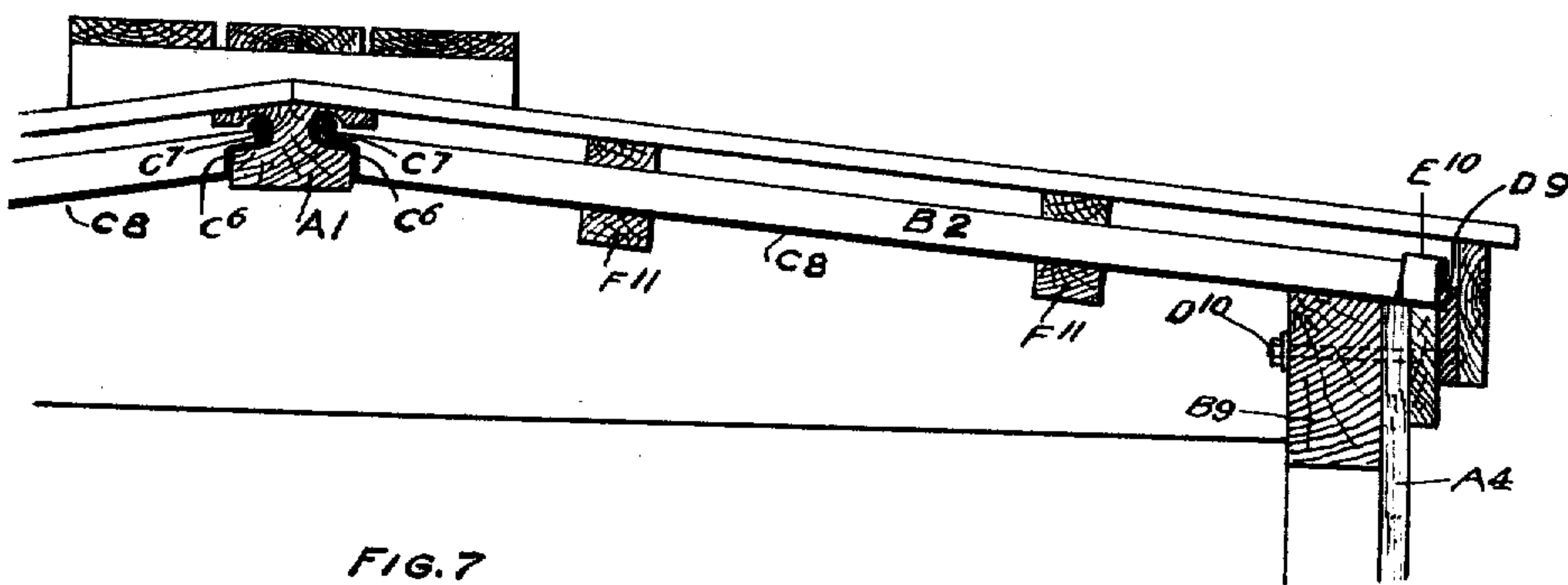


FIG. 7

WITNESSES:  
Esther Diamond  
J. J. Kelly.

James Masker  
INVENTOR



# UNITED STATES PATENT OFFICE.

JAMES MASKER, OF HAMMOND, INDIANA.

## CAR-ROOF.

No. 913,412.

Specification of Letters Patent.

Patented Feb. 23, 1909.

Application filed April 13, 1907, Serial No. 367,946. Renewed December 29, 1908. Serial No. 469,774.

*To all whom it may concern:*

Be it known that I, JAMES MASKER, a citizen of the United States, residing at Hammond, in the county of Lake and State of Indiana, have invented a certain new and useful Improvement in Car-Roofs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings; forming a part of this specification, and to the model filed herewith.

My invention relates to new and useful improvements in car roofs of that class commonly known as "inside roofs" and particularly contemplates the provision of an inside roof constructed for the greater part of metal plates so held by the ridge pole and carlines that they are capable of independent movement to overcome the heavy strain put upon them, while at the same time forming an absolutely water-tight construction.

My invention further and specifically resides in the following features of construction and arrangement as will be hereinafter described with reference to the accompanying drawings, forming a part of this specification, in which like characters are used to designate like parts throughout the several figures, and in which,

Figure 1 is a perspective view of a portion of a roof constructed in accordance with my invention, Fig. 2 is a similar view of one of the metal plates used therein, Figs. 3 and 3<sup>a</sup> are respectively a front elevation and a sectional view of one of the securing elements, Figs. 4 and 5 are similar perspective views of intermediate and end carlines respectively, Fig. 6 is a perspective view of the ridge pole, Fig. 7 is a transverse sectional view through a portion of a completed car roof constructed in accordance with my invention, and Fig. 8 is a perspective view of one of the carline end caps.

In the practical embodiment of my invention and with particular reference to the drawings, I provide a ridge pole A<sup>1</sup> having longitudinal undercut channels A<sup>2</sup> and openings A<sup>3</sup> therethrough communicating with said channels. C<sup>8</sup> indicate a number of rectangular metal plates having three of their sides formed with upstanding flanges C<sup>6</sup> having their longitudinal edges curled about metal rods C<sup>7</sup> to strengthen the same, and having their abutting short edges soldered together. The intermediate and end carlines B<sup>2</sup> and B<sup>3</sup> and B<sup>4</sup> respectively are each

formed with reduced ends B<sup>7</sup> adapted to fit snugly within the openings A<sup>3</sup> in the ridge pole A<sup>1</sup>. The intermediate carlines B<sup>2</sup> are further formed on the lower face with parallel channels B<sup>5</sup> while the end carlines B<sup>3</sup> and B<sup>4</sup> are provided on their lower face with a single channel B<sup>6</sup>, said channels B<sup>5</sup> and B<sup>6</sup> being designed to receive loosely therein the longitudinal flanges C<sup>6</sup> of the metal plates C<sup>8</sup> arranged between the carlines, the end flange C<sup>6</sup> of said plates being provided with an angular extension flange 9 having an upwardly curled outer edge bent about a metallic rod C<sup>7</sup> and adapted to be carried within the channels A<sup>2</sup> of the ridge pole A<sup>1</sup>, to form a closure for the upper ends of the carlines B<sup>2</sup> thus forming with said plates, said carlines and said ridge pole a perfectly water-tight structure while permitting the metal plates C<sup>8</sup> sufficient play to prevent the buckling or bending of the same under the heavy torsional strains imposed upon them.

In the car construction illustrated in Fig. 7, A<sup>4</sup> represents the side thereof, B<sup>9</sup> represents the side beams secured thereto and F<sup>11</sup> represents the purlins, upon which the carlines rest. The straight edge of the metal plates C<sup>8</sup> extends slightly beyond the sides A<sup>4</sup> of the car and engages within slots D<sup>9</sup> of securing plates D<sup>9</sup> bolted through the side A<sup>4</sup> and the side beam B<sup>9</sup> by bolts D<sup>10</sup>. Thus the fastening of each element is provided for, securing plates D<sup>7</sup> bolted through the side A<sup>4</sup> and the side beam B<sup>7</sup> by bolts D<sup>11</sup>. Thus the fastening of each element is provided for, the outer ends of the carlines being covered by caps E<sup>10</sup> fitting thereover and bolted or otherwise secured to the sides A<sup>4</sup> of the car.

From the foregoing description it will be seen that I provide a construction in which the main elements are securely, though movably held in their relative positions in such manner as to allow of sufficient movement to prevent the buckling and bending of the metal plates under the strain put upon them by the pitching of the moving car and to allow the same to remain in their normal water-tight engagement.

Having thus described my invention, I claim:

In an inner car roof of the character described, the combination with a ridge pole having longitudinal undercut channels, and openings therethrough communicating with said channels, of a plurality of carlines having reduced ends fitting within said openings

and having longitudinal channels therein, a plurality of metallic roof plates having up-  
standing flanges on both sides and the upper  
end thereof, said end flange having an an-  
5 gular extension flange provided with an up-  
wardly curled edge and adapted to lie within  
the said undercut channels of the ridge pole  
to form closures for the upper ends of the said  
carlines, and means to secure the outer ends

of said carlines and said plates, substantially 10  
as described.

In witness whereof I hereunto affix my  
signature in presence of two witnesses this  
8th day of April, 1907.

JAMES MASKER.

Witnesses:

ESTHER DIAMOND,  
J. F. REILLY.