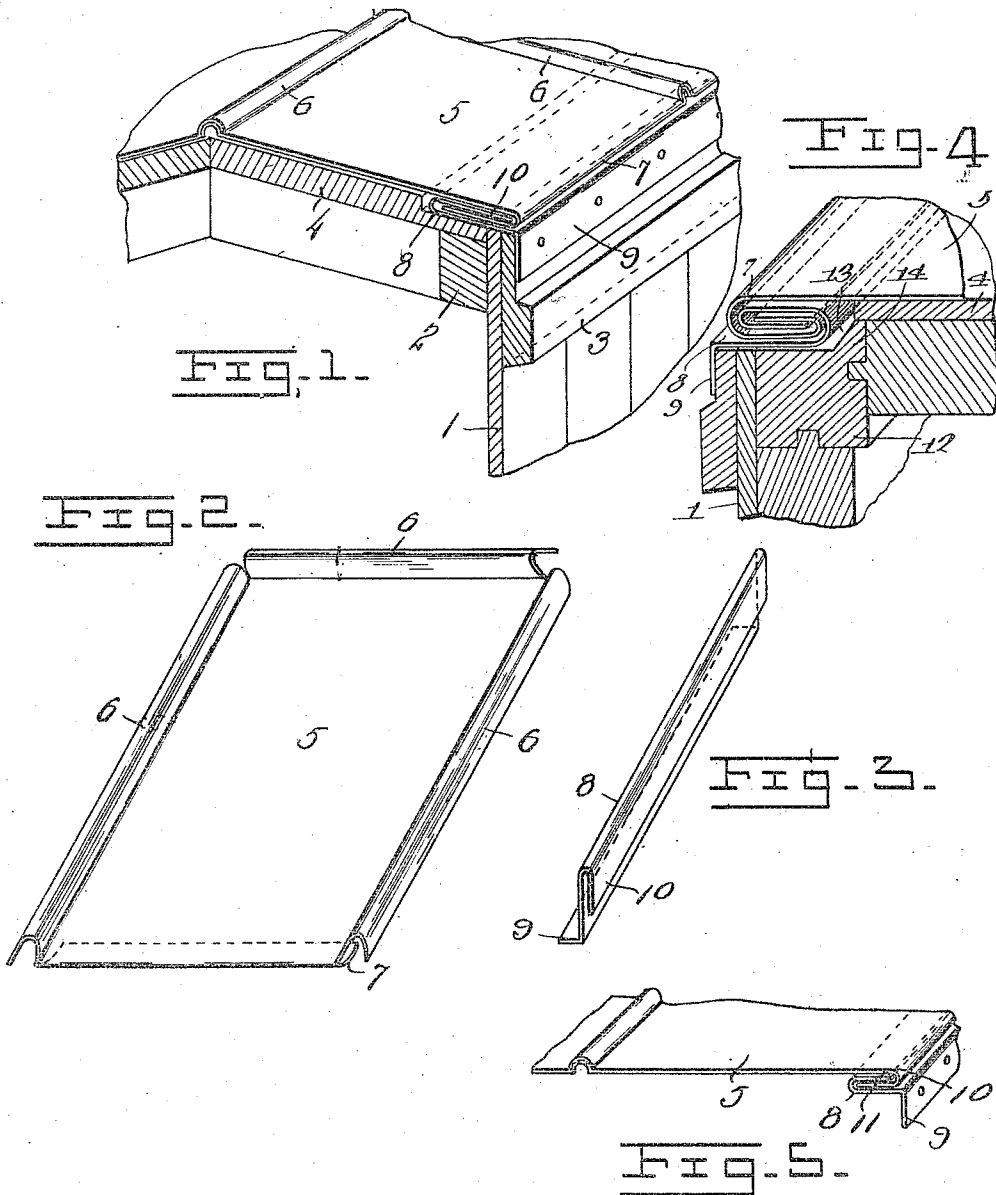


J. J. TATUM.
CAR.

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CAR.

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To all whom it may concern:

Be it known that I, JOHN J. TATUM, a citizen of the United States, residing at Baltimore city, in the State of Maryland, have invented a new and useful Improvement in Cars, of which the following is a specification.

The primary object of my invention is to provide means for fastening the roof sheets at the eaves in such manner as to prevent any strain whatever on the roof sheets by reason of the weaving or twisting of the car.

My invention consists of means permitting an entirely free movement of the roof sheets while furnishing a reliable fastening which permits the roof to radiate over the car in any position that conditions of the car, in service or otherwise, subject it to.

In the drawing, Figure 1 is a detailed perspective view of a car the parts being in section; Fig. 2 is a perspective view of a roofing sheet embodying my invention; Fig. 3 is a perspective view of the flashing; Fig. 4 is a detail sectional view of a car embodying a still further modification; Fig. 5 is a similar view embodying a still further modification.

1 represents a box car of approved construction having a side plate 2.

3 is a fascia, the lower portion of which is much thicker than the upper portion.

4 is the sub-structure.

5 is a roof sheet, three edges of which are bent as at 6 to form loose joints between the contiguous sheets of the roof. The outer edge of the sheet has a return-under-bend 7 spaced from the body of the sheet.

8 is a flashing having the depending portion 9 which is adapted to be secured by nails, bolts, or otherwise, to the fascia or side of the car, said flashing having a return over-bend 10 which is adapted to interlock and form a loose joint with the return bend 7 of the roof sheet 5. The return bend 10 of the flashing is spaced from the body thereof, as is clearly shown in the drawing.

In Fig. 1 it will be observed that the side sheathing of the car and the fascia extend above the side plate and that the sub-structure, that is the wooden sheathing of the roof, is provided with a cut-away portion within which the joint formed by the roofing sheet and the flashing is positioned. In Fig. 4 the side plate 12 is provided with a cut-away portion 13 leaving an upwardly projecting part 14 on which the ends of the

wooden roof of the car are secured. The side sheathing of the car and the top of the fascia are on a level with the bottom of the cut-away portion, thereby forming a groove or recess on the top of the side plate in which the joint between the roofing sheet and the flashing is positioned.

It will be observed in all of the figures that the extreme outer edge of the roofing sheets is within the lines of the car. That is to say, some portion of the car structure projects beyond the edge of the roofing sheets. In the drawings the part of the structure projecting beyond the outer end of the roofing sheet is the fascia and the outer edge of the roofing sheets is still further protected by the thickened lower portion of the fascia.

As is well known to those skilled in the art car roofs are frequently damaged and in a number of cases torn from the car by what is known as "side scraping." It will be seen that from the fact that the outer edge of the roofing sheet is not only within the thickened portion of the fascia but is within the lines of the upper thinner portion, it is protected against damage by "side scraping."

In order that the roofing sheets may be free at the ends of the car I provide the same kind of joint at each end of the car as is provided at the outer end of the roofing sheets at the eaves of the car. By this construction it will be obvious that the roof sheets are free to adapt themselves to the various strains, twists and distortions to which they are subjected in service.

It will be noticed in the several views that the flashing return-bend and the roof sheet return-bend are shorter than the depth of the fold, that is to say, when the two bends are brought together the construction is such that the extreme edges of the bend will not reach the bottom of the fold, whereby ample space is provided for the zigzag movement, weaving, twisting and radiation of the roof without strain on the joint.

In using the roll seam, naturally a part of the wooden roof near the eaves is exposed to the elements. To prevent damage to the roof by the elements, I extend the flashing some distance on the wooden roof back of the eaves, as shown in dotted lines in Fig. 1.

If the flashing should become damaged in any way, it is of minor cost to renew the same and replace it, as it can be readily

slipped from engagement with the return-bend of the roofing sheet.

By fastening down the outer edges of the roofing sheets by the flashings I am enabled to eliminate all castings at the eave of the roof which have heretofore been employed for holding the roof down.

The return-bend, I have found in practice, may be made on any roofing sheet irrespective of the character of the seam between the contiguous roofing sheets.

The end flashing should be wider than the side flashing, and sufficiently wide to receive the grab iron or other parts fastened to the end roof sheet, with its fold or joint back or behind these fastenings to the car, so as to permit free movement of the working joints and eliminate any tendency to retard these movements by the grab irons and parts fastened to the first sheet, in order that there may be no strains upon the roof incident to the weaving or twisting of the car.

What I claim is—

1. The combination with the side wall of a car, of roofing sheets having return under bent edges within the vertical plane of the outside of the car wall, and a flashing extending across the vertical plane of the outside wall and having an upturned return bend making a loose engagement with said rebent edge of the roof sheets back from the vertical plane of the side wall.

2. The combination with the side walls and fascia of a car, of roofing sheets having return under bent edges within the vertical plane of the outside of the car wall, and a flashing extending across the fascia and across the vertical plane of the outer side of the side wall and having an upturned re-

turn bend making a loose engagement with said rebent edge of the roof sheets back from said vertical plane of the side wall.

3. The combination with the side walls of a car, of roofing sheets having return under bent edges within the vertical plane of the inner face of the side wall, and a flashing extending across the side wall and beyond the vertical plane of the inner face of the wall and having an upturned return bend making a loose engagement with said rebent edge of the roofing sheets back from the said vertical plane of the inner face of said wall, said flashing forming a water shed.

4. The combination with the side walls and wooden roof of a car, of roofing sheets having return under bent edges within the vertical plane of the outside of the car wall, and a flashing extending across the vertical plane of the outer side of the car wall and having an upturned return bend making a loose engagement with said rebent edges of the roofing sheets back from the vertical plane of the side wall.

5. The combination with the side wall of a car, of roofing sheets having return under bent edges within the vertical plane of the outside of the car wall, and a flashing extending across the vertical plane of the outside wall and making a loose engagement with said rebent edges of the roof sheets back from the vertical plane of the side wall.

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

JOHN J. TATUM.

Witnesses:

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JAS. O. BEAUMONT.