J. PEARSON.

CAR ROOF.

APPLICATION FILED JAN. 20, 1908.

949,838. Patented Feb. 22, 1910.

Fig. 1.

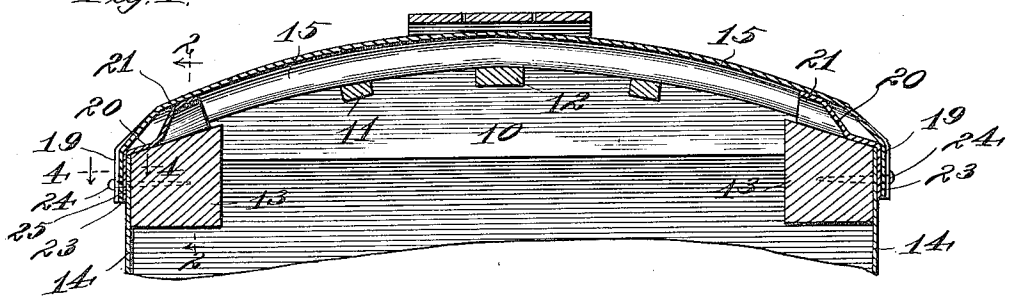


Fig. 2.

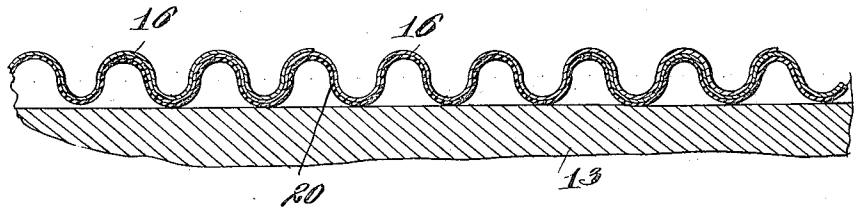


Fig. 6.

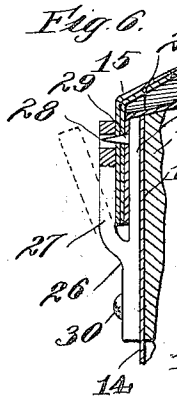


Fig. 3.

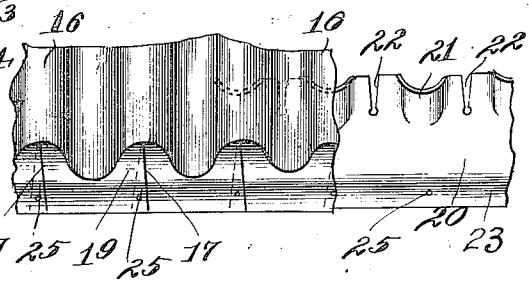


Fig. 7.

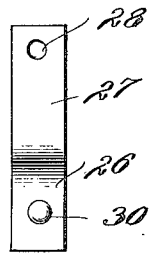


Fig. 4.

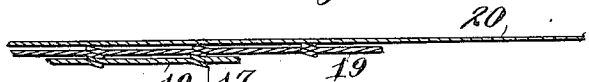
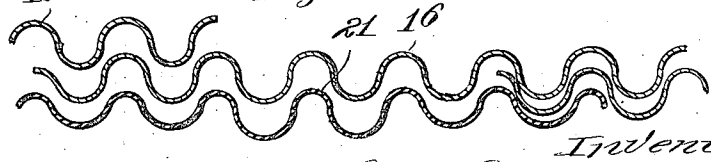


Fig. 5.



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UNITED STATES PATENT OFFICE.

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CAR-ROOF.

949,838. Specification of Letters Patent. Patented Feb. 22, 1910.

Application filed January 20, 1908. Serial No. 411,554.

To all whom it may concern:

Be it known that I, JOHN PEARSON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car-Roofs, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to an improved car-roof and the invention consists in the novel constructions, combinations and arrangements of parts hereinafter described and then particularly pointed out in the appended claims.

In the accompanying drawing in which like reference numerals indicate like parts in the several figures; Figure 1 is a cross-sectional view of a car with the lower part broken away having a roof embodying my invention; Fig. 2 is a detail longitudinal vertical sectional view on the line 2—2 of Fig. 1; Fig. 3 is a plan view of one side of the car roof with parts broken away showing the filler-strip; Fig. 4 is a detail longitudinal horizontal sectional view on the line 4—4 of Fig. 1; Fig. 5 is a view similar to Fig. 2 with the parts separated for the purpose of better illustration. Fig. 6 is a view in side elevation of my improved fastener illustrating the manner of assembling the sheets and filler-strip with the fastener, parts being broken away; and Fig. 7 is a front view of the fastener.

In the drawing 10 indicates the carlines, 11 the purlins, 12 the ridge-purlin, 13 the side-plates, and 14 the sidings of the car, all of said parts being of the ordinary construction. The sheets 15 composing the roof are preferably made of galvanized iron, though it is of course to be understood that they may be made of any suitable material, and are provided with a series of corrugations extending the length of each sheet and comprising the upper and lower corrugations 16. The sheets or panels are somewhat greater in length than the width of the car, and are split or slitted along the crown or apex of the corrugations 16, as shown at 17, a suitable distance to form wings 19 which may be turned down and secured to the side-plates so as to cover the ends of the channels formed by the corrugations. The wings formed by each slit or cut overlap by reason of the excess of metal embodying the corrugations, and when bolts or other similar fastenings are employed they may be passed through the overlapping parts of the wings in order to co-act with the double thickness of metal thereby formed. The panels or sheets are made of any preferred widths and of sufficient length to extend across the entire width of the car and be secured to the plates in any suitable manner. In assembling the sheets each succeeding sheet overlaps the next preceding sheet a suitable distance to form an overlapping joint, and as shown in Figs. 2 and 5 this distance is substantially the width of two corrugations, the corrugations 16 of the overlapping sheet fitting over similar corrugations of the under sheet.

A filler-strip 20 preferably of sheet metal extends the length of the car and is provided at its rear with raised portions 21 which may be formed in any preferred manner, it being obvious that when the filler is made of metal it may be slitted as at 22 to allow the portions 21 to be suitably formed or struck up as corrugations in the metal. The front of the strip is bent downward at 23 to conform to the edge of the side plate 13. The corrugations 21 are of substantially the same width, height and curve as the corrugations 16 and are adapted to fill the channel formed by the corrugations to close the same in a manner to be made plain. It is to be understood that the filler-strip is a narrow strip which extends along the edge of the roof but a short distance across the top of the car as shown in Fig. 1.

In constructing a roof embodying my invention the filler-strips are first placed in position along the edges of the car over the side-plates and upon them are then positioned the panels or sheets 15, each succeeding panel overlapping substantially two corrugations of the next preceding one, or a sufficient number to form a suitable joint, as hereinbefore described, the corrugations 21 of the filler-strips occupying the channels or grooves formed in the sheets 15 by the corrugations 16 and forming a filler or closure for the same. The wings 19 overlap the bent ends 23 of the filler-strips and are secured to the plates 13 in any suitable manner, as by nails 24 as shown in Fig. 1, the portions 19 and 23 having suitable holes 25 to receive the nails, though I preferably employ for this purpose a fastener such as shown in Figs. 6 and 7. This fastener is substantially Y-shaped comprising a flat body 26, preferably of malleable iron though

any suitable material may be used, having an angularly disposed arm 27 which is provided with an opening 28 to receive a pin 29 made integral with the body or secured thereto in any suitable manner. The body is adapted to be attached to the side of the car in any desired manner, as by nails 30. When such a fastener is used the body of each fastener is so positioned that when the filler-strips and panels are assembled the pins 29 pass through the holes 25, the arms 27 are then bent inwardly toward the pins 29 which also pass into the openings 25. The holes 28 are of sufficient size to permit the pins to pass loosely therethrough to allow the filler-strips and sheets to pivot thereon and thus provide elasticity for any movement of the sheets and filler-strips which may be due to the action of the car when in motion, thereby materially reducing the straining effect upon the roof. In a car roof thus constructed and embodying my invention the raised portions 21 of the filler-strips serve to close the channels in the panels formed by the corrugations 16 and thus prevent water or other foreign matter which may get in between the side-plates and the panels from entering the car. By slitting the corrugations 16 as at 17 and lapping one of the two sections thus formed over the other, the ends of the panels may be bent down to form wings which cover the ends of the channels formed by the corrugations 16, so that the danger of water, etc., getting in between the panels and side-plates is reduced. Obviously, by employing both features the danger is practically obviated as any water, etc., which may pass the wings 19 will be arrested by the filler-strip and run out between the strip and panel. By providing the panels with wings and the filler-strip with the downwardly bent edge 23 I am able to secure both parts to the side-plates by the same fastening.

Having described my invention I claim:

1. In a car roof, a side-plate, a series of channeled metallic sheets depending over the side-plate, a corrugated metallic filler-strip adapted to close the channels in the sheets and having its front edge depending over the side-plate, and means to secure the depending edges of the sheets and filler-strip to the side-plate.

2. In a car-roof, a series of channeled sheets or panels, a side-plate, and a corrugated filler-strip between the plate and panels, the corrugations of the strip closing the channels of the sheets, the edges of the sheets and strips being bent over and secured upon the side-plate, and the sheets and strips being slitted in and between their corrugations respectively.

3. In a device of the class described, a car-roof composed of sheets having perforated wings, and fasteners consisting of a body adapted to be secured to the side of a car and having a pin adapted to pass through the perforation in the wings and an arm on the body provided with an opening in its free end adapted to receive the pin.

4. In a device of the class described, a car-roof composed of sheets having perforated wings and perforated filler strips, and Y-shaped fasteners consisting of a body adapted to be secured to the side of a car and an arm adapted to receive the wings and filler-strips therebetween, an opening in the free end of the arm, and a pin on the body adapted to pass through the perforations and into the opening in the arm.

5. In a device of the class described, a car-roof composed of a series of corrugated sheets having overlapping wings, and a filler-strip having a series of corrugations at one side adapted to register with and fill the corrugations of the sheets and its other side bent down under the wings to conform to the edge of the car.

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

JOHN PEARSON.

Witnesses:
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