Aug. 28, 1951 J. S. SWANN 2,565,705

CAR FLOOR PROTECTOR

Filed Aug. 20, 1949

Fig. 1

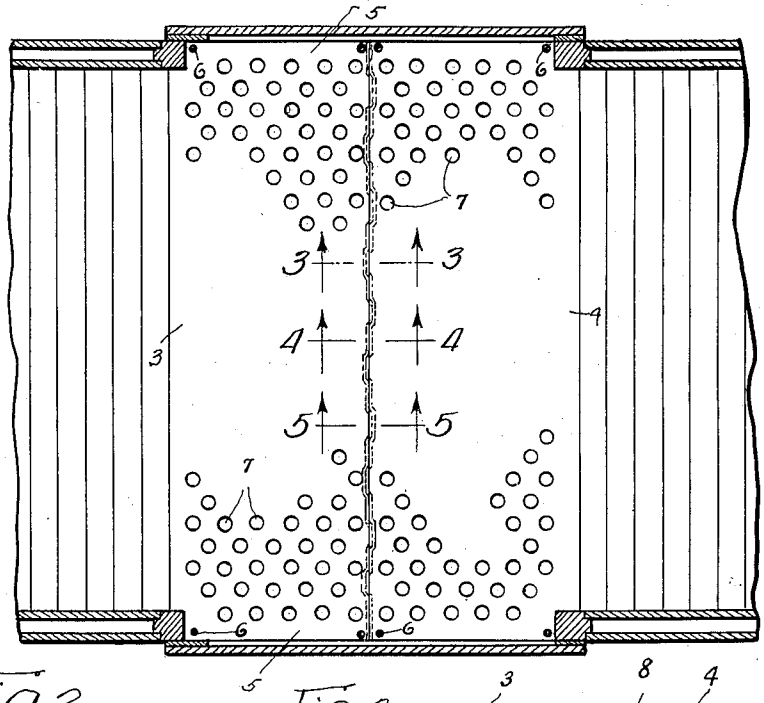


Fig. 2

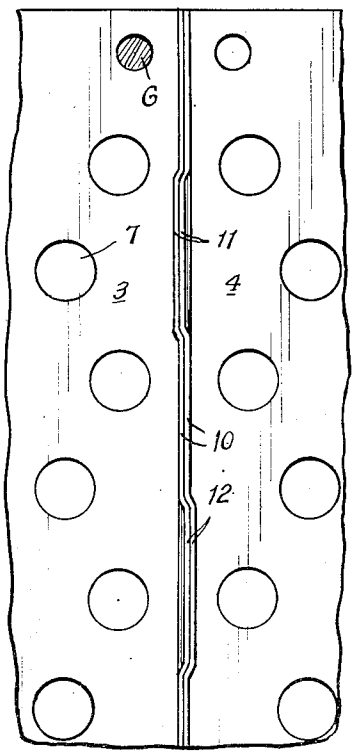


Fig. 3

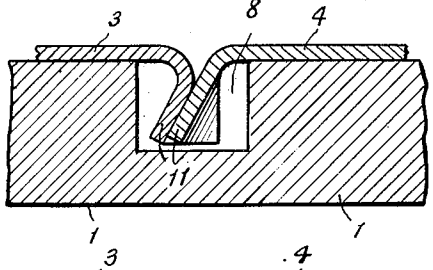


Fig. 4

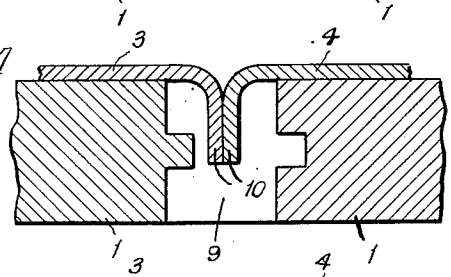
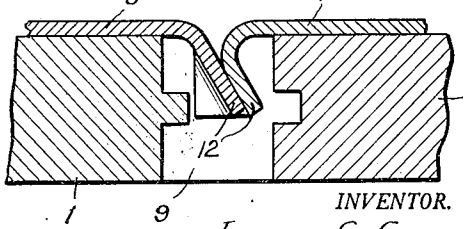


Fig. 5



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CAR FLOOR PROTECTOR

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4 Claims. (Cl. 105—422)

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This invention relates to improvements in wall protectors and has specific reference to covers to protect walls comprising wooden boards commonly used on walls and floors of railway freight cars.

The improved wall cover is especially adapted to protect and strengthen the floors of railway cars wherein a plurality of tongued and grooved, or otherwise rabbeted boards, extend crosswise of the car and are supported by the side and center sills of the car.

An important object of the invention is to provide a metallic floor covering to strengthen the floor, and to protect the floor from the abuse caused by loading trucks passing thereover in loading and unloding the car especially between the doorway thereof.

The principal object of the invention is to provide simple means associated with flanges of adjacent protector plates whereby when said flanges are abutted together and in place on the floor, they become interengaged and the margins of said plates adjacent said flanges cannot become warped or rise one from the other, due to the weight and abuse of heavily laden trucks passing thereover, and thereby form projections, resulting in an uneven floor which may damage lading or trip a workman walking on said floor.

Other objects and advantages of the invention will appear in the following description thereof.

Referring now to the accompanying drawing forming part of this application and wherein like reference characters indicate like parts:

Figure 1 is a plan view of a portion of a railway car floor showing my improved floor protector extending between opposite doorways of said car.

Figure 2 is an enlarged bottom plan view of a portion of a pair of the improved floor protector plates.

Figure 3 is a section on the line 3—3, Figure 1, showing the floor protector applied to a floor having a slot formed therein for a reception of the protector flanges.

Figures 4 and 5 are respectively sections of lines 4—4 and 5—5 of Figure 1 showing the floor protector applied to a floor formed of tongued and grooved boards, adjacent boards being separated sufficiently to receive the protector flanges.

The invention will be described as applied to the floor boards of a railway car, though it is understood the same may be applied to the side walls thereof with equally desirable results.

The floor boards of the car are shown at 1, which are ordinarily tongued and grooved boards

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laid crosswise of the car and cover the entire car floor framing from end to end thereof. It is desirable to protect the floor boards which extend between opposite doorways in the wall of the car, since these boards are subject to the greatest abuse, and to that end those boards at least are covered with the improved protector. These doorway boards are of reduced thickness so that when the protector is applied thereover, the wearing surface of the protector will occur in the same horizontal plane with the remainder of the boards constituting the floor.

The doorway protector comprises two plates 3 and 4 each of a length to extend entirely across the car between the doorways 5 thereof, and are secured firmly in place by a plurality of countersunk bolts indicated at 6. Each plate is provided with a plurality of small holes or perforations 7 over the entire body portion thereof through which fastening means may extend for securing lading to the floor.

Each plate 3 and 4 is provided with a downturned marginal flange, which, when the plates are assembled upon a car floor, extend within a longitudinal slot 8 cut therein, or within space 9, between adjacent boards 1—1 spaced for the purpose. These flanges shown most clearly in Figures 2, 3 and 4 are each provided with a plurality of longitudinally spaced straight portions 10 extending substantially normal to the plane of the plate. Immediately adjacent each straight portion 10 are provided alternately inclined portions 11 and 12; that is, the portions 11 are inclined one way and the portions 12 the other way from the plane of the plates.

It is thus apparent that when the plates are secured as above described to a railway car floor, with adjacent flanges of the plates abutting each other flatwise, neither flange could rise due to the action of heavy trucks running over the plates without the other. In other words, the overlapping of the alternately inclined portions 11 and 12 results in one flange holding the other flange down in place.

I claim:

1. A protecting covering for the floor of a railway car comprising a pair of plates, each having a flange along one side margin extending substantially normal to the plane of said plate, said flange having spaced portions thereof which are alternately oppositely inclined to the plane of said plate throughout the entire length of said flanges, said portions being inclined the full depth of said flange, and portions which are substantially normal to the plane of said plate alternating with

said inclined portion, said portions of the flange of one plate adapted to register with said portions of the flange of the other plate to maintain the meeting margins of said pair of plates in the same planes when upon a floor.

2. A structure substantially as defined in claim 1 wherein all of said portions are of substantially equal length.

3. A protecting covering for the floor of a railway car comprising a pair of plates, each having a flange along one side margin extending substantially normal to the plane of said plate, said flange having spaced portions thereof which are alternately oppositely inclined to the plane of said plate throughout the entire length of said flanges, said portions being inclined the full depth of said flange, said portions of the flange of one plate adapted to register with said portions of the flange of the other plate to maintain the meeting margins of said pair of plates in the same planes when upon a floor.

4. A protecting covering plate, adapted for use in multiple for protecting the floor of a railway car, said plate having a flange along one side

margin extending substantially normal to the plane of said plate, said flange having portions thereof which are alternately oppositely inclined to the plane of said plate throughout the entire length of said flange and for the full depth of said flange, said inclined portions of the flange of one plate adapted to register with corresponding portions of the flange of an adjacent plate to maintain the meeting margins of a pair of said plates in the same plane when secured upon a car floor in abutting relation.

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