

No. 658,737.

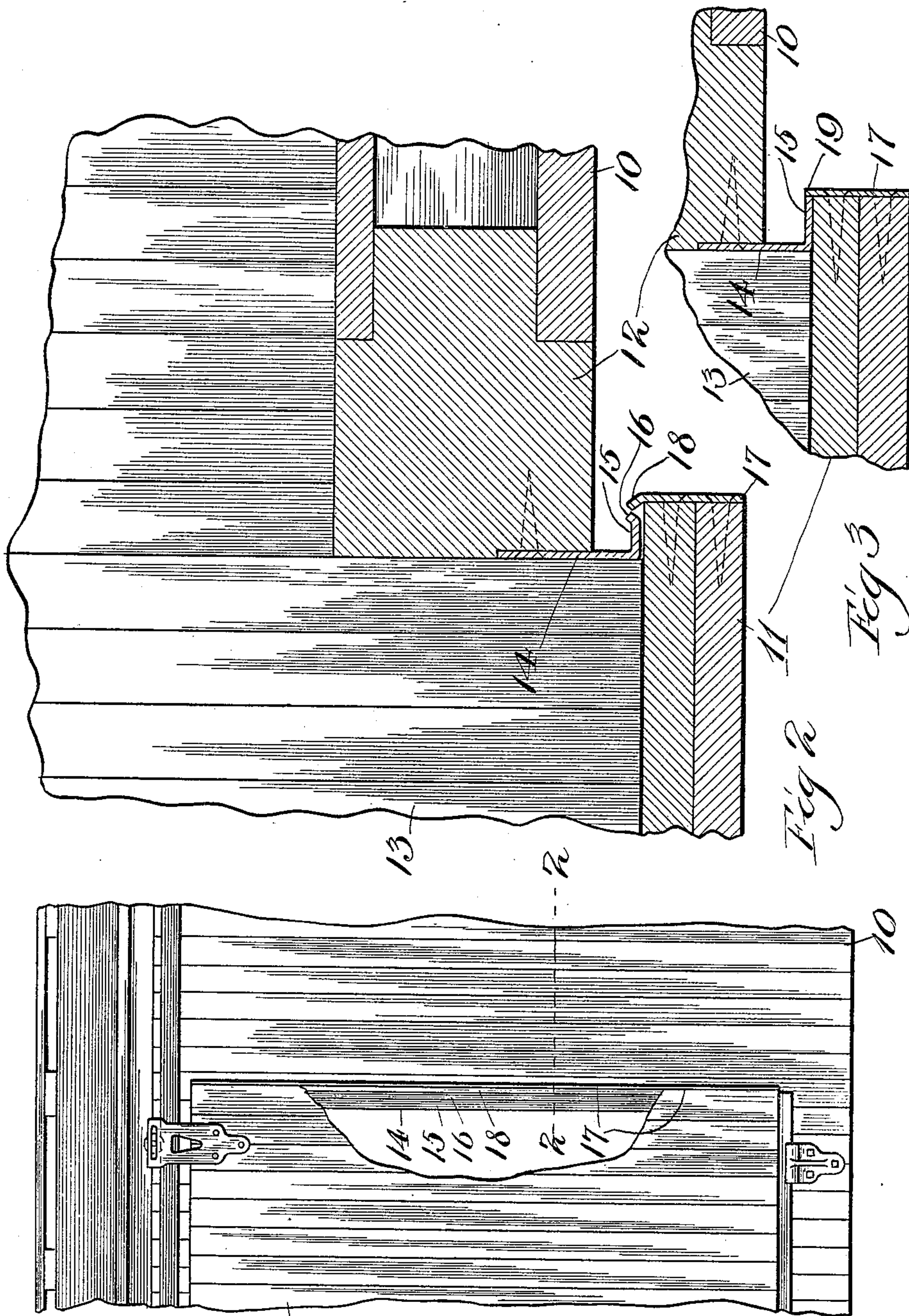
Patented Sept. 25, 1900.

J. M. HOPKINS.

WEATHER GUARD FOR FREIGHT CAR DOORS.

(Application filed July 23, 1900.)

(No Model.)



Witnesses
W. C. Cooley
Wm. Geiger

Fig. 1

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UNITED STATES PATENT OFFICE.

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WEATHER-GUARD FOR FREIGHT-CAR DOORS.

SPECIFICATION forming part of Letters Patent No. 658,737, dated September 25, 1900.

Application filed July 23, 1900. Serial No. 24,529. (No model.)

To all whom it may concern:

Be it known that I, JAMES M. HOPKINS, a citizen of the United States, and a resident of Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Weather-Guards for Freight-Car Doors, of which the following is a specification and which are illustrated in the accompanying drawings, forming a part thereof.

10 This invention relates to weather-guards for freight-car doors, and is an improvement upon the weather-guard forming the subject of Letters Patent No. 651,005, granted to S. H. Campbell on the 5th day of June, 1900.

15 The object of this invention is to provide a weather-guard for the doors of freight-cars in which the door-post does not project beyond the surface of the side of the car-body and which will so deflect the air-currents that they will pass by the joint or space necessarily existing between the weather-guard attached to the body of the car or the door-post and that which is applied to the door. This object is attained by the construction herein-
25 after described and which is illustrated in the accompanying drawings, in which—

Figure 1 is a detail side elevation of the body of a freight-car, a part of the door being broken away. Fig. 2 is a detail section on the line 2 2 of Fig. 1, drawn to a larger scale; and Fig. 3 is a detail section on the same line, showing a modified form of the weather-guard.

35 The side of a car-body is shown at 10, and a portion of a sliding door therefor is shown at 11. The rear door-post is shown at 12, and its outer face is in the same plane as the surface of the side 10 of the car-body. When this form of post is used, the floor 13 of the car projects slightly beyond the plane of the car side, so that the door 11 may lie closely against it when closed, while standing at a sufficient distance from the side of the car, so that it may slide over it without
45 abrasion.

A metal plate 14 is secured to the post 12 its entire length and projects beyond the outer face thereof approximately as far as does the floor 13 at the doorway. At the line
50 of the outer edge of this projecting portion of the floor the plate 14 is bent backwardly,

as shown at 15, and its extreme outer edge is bent inwardly, as shown at 16, toward the outer surface of the post 12.

A plate 17 is applied to the rearward edge 55 of the door 11 and extends from top to bottom thereof and projects beyond the inner face of the door, this projecting portion being preferably inclined forwardly, as shown at 18, and being of such width that when the door is closed its inner edge will be approximately in line with the edge 16 of the plate 14.

Air-currents which follow the surface of the car side will be deflected outwardly by the plate 14 and guided along its surface 65 will be directed inwardly by the intumed portion or edge 16 of the plate, so as to pass across the space or joint between the plates 14 and 17. Air-currents entering the space between the rearward portion of the door and
70 the side of the car obliquely will be guided by the inwardly-projecting portion 18 of the plate 17, so as to pass across the space or joint between this plate and the plate 14.

The objects of the invention will be measurably secured by the construction illustrated in Fig. 3 of the drawings, wherein the leaf 15 of the plate 14 is flat and has no inwardly-inclined portion, while the inwardly-projecting portion 19 of the plate 17 is in the same
80 plane as the body portion thereof and is not forwardly inclined, as shown at 18 in Fig. 2.

I claim as my invention—

1. In a weather-guard for freight-cars, in combination, a car-body having a doorway 85 and door-post and a bearing for the door projecting beyond the outer face of the post, a plate projecting outwardly from the post and being bent at its outer end backwardly from the doorway, a sliding door for closing the doorway, and a plate projecting inwardly from the rearward end of the door.

2. In a weather-guard for freight-cars, in combination, a car-body having a doorway 95 and door-post and a bearing for the door projecting beyond the outer face of the post, a plate projecting outwardly from the post and being bent at its outer end backwardly from the doorway and inwardly toward the side of the car-body, a sliding door for closing the doorway, and a plate projecting inwardly from the rearward end of the door. 100

3. In a weather-guard for freight-cars, in combination, a car-body having a doorway and door-post and a bearing for the door projecting beyond the outer face of the post, a
5 plate projecting outwardly from the post and being bent at its outer end backwardly from the doorway and inwardly toward the side of the car-body, a sliding door for closing the doorway, and a plate projecting inwardly
10 from the rearward end of the door and having the inwardly-projecting portion inclined forwardly.

4. In a weather-guard for freight-cars, in combination, a car-body having a doorway

and a door-post flush with the side wall of 15 the body and having its floor extended outwardly across the doorway to serve as a bearing for a sliding door, a plate projecting outwardly from the post and bent at its outer end backwardly from the doorway, a sliding 20 door for closing the doorway, and a plate projecting inwardly from the rearward end of the door.

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Witnesses:

S. H. CAMPBELL,

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