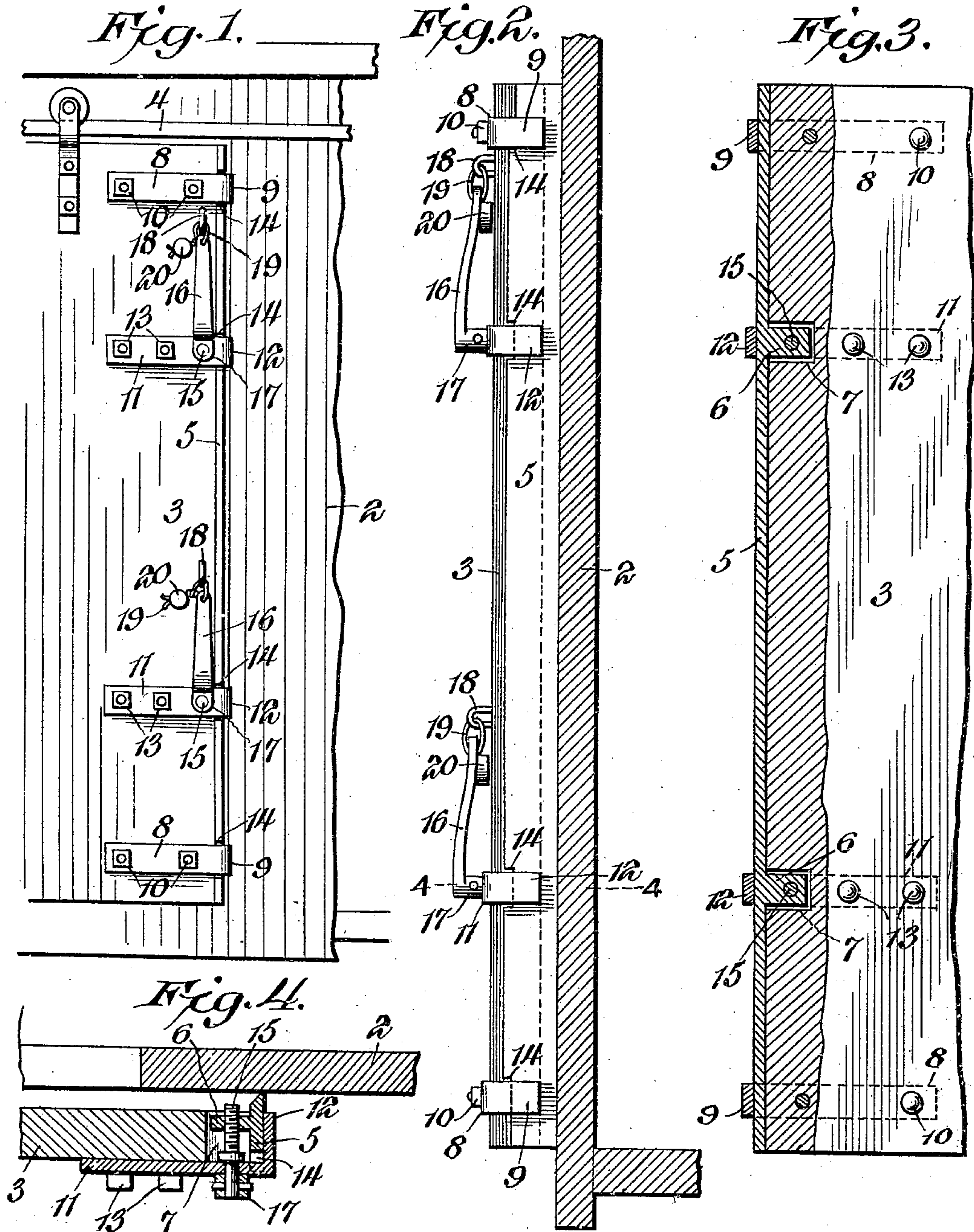


J. M. JORDAN.
WEATHER AND CINDER STRIP FOR BOX CAR DOORS.
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WEATHER AND CINDER STRIP FOR BOX-CAR DOORS.

955,516.

Specification of Letters Patent.

Patented Apr. 19, 1910.

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To all whom it may concern:

Be it known that I, JOHN M. JORDAN, a citizen of the United States, residing at Summit, in the county of Emanuel and State of Georgia, have invented a new and useful Weather and Cinder Strip for Box-Car Doors, of which the following is a specification.

My invention relates to an attachment for the doors of freight or box cars, and particularly to an adjustable cinder strip and weather strip for the edges of such doors, and to means whereby the cinder strip may be forced into engagement with the side of the car, practically locking the door in place, effectually sealing and closing the opening between the inside face of the door and the siding, the instrumentality affording means also whereby the door may be effectually sealed so that any unauthorized opening thereof will be plainly evident.

The invention consists in the provision of a laterally shiftable cinder strip mounted in guides upon the door edge, and having screw-threaded engagement with one or more adjusting bolts, which when rotated in one direction force the cinder strip inward, these bolts being attached to arms or levers whereby they may be turned.

In the drawings, wherein an embodiment of my invention is shown, Figure 1 is a fragmentary side elevation of a portion of a box car and the sliding door thereon, the cinder strip and said attaching devices being shown in elevation; Fig. 2 is a rear end elevation of the door enlarged, the siding of the car being shown in section; Fig. 3 is a fragmentary view enlarged of the rear edge of the door partly in section, the cinder strip and its guide being also in section; Fig. 4 is a transverse section on the line 4—4 of Fig. 2.

In the drawings, 2 denotes the siding of any ordinary box or freight car, and 3 the sliding door thereof, which, as usual in constructions of this character, is supported by rollers upon an overhead track 4. Great inconvenience is caused in doors of this character by the fact that the doors do not fit closely up against the siding so that a space is left of varying widths in different cars between the inside face of the door and the outside face of the car siding. Ordinarily the space is closed by a strip or batten, which is nailed to the rear end of the door and projects into more or less close contact with the face of the car. Unless

this strip be used there is great liability of cinders, sparks, and dust entering the car through the opening and damaging or possibly setting fire to the contents thereof. Where a nailed strip is used it can never be forced into tight contact with the car siding, as this acts to prevent the easy opening of the door, and it is inconvenient to nail the batten on or take it off each time that the door is closed or opened. In my invention I use a metallic cinder strip, 5, which takes the place of the wooden batten or strip and is supported against the rear edge of the door, the strip extending inward and when in position closing the space between the door and the siding as shown in Fig. 4. This strip is adjustably supported on the rear edge of the door by ears, 6, shown in the drawings as two in number, projecting each into a transverse recess, 7, in the rear edge of the door as shown in Fig. 3.

Attached to the front of the door, preferably at the upper and lower ends thereof are the guide plates or L-shaped irons, 8, having the angled or inwardly turned ends 9, which extend over the rear face of the plate 5. Nuts and bolts 10 hold the guide plates 8 in place. Intermediate of the guide irons or plates 8 I provide the guide irons 11, which are practically similar to the irons 8 and have the inwardly turned ends 12 which are also bent around and across the rear face of the strip 5. The inwardly bent arms of the L-shaped members 8 and 11 extend across the edge of and are spaced from the door so that the plate 5 can slide back and forth between the edge of the door and the said arms. Bolts 13 hold the guide irons 11 in place. The strip 5 is notched as at 14 and the guide irons 8 and 11 are received in these notches. These notches permit the plate 5 to be moved so that its outer edge is beyond the outer faces of the irons 8 and 11, and the rear edge of the strip 5 is therefore within the inner plane of the door.

Through each of the irons 11 passes a screw, 15, which has screw-threaded engagement with the ear 6. The exterior end of the screw 15 has pinned or otherwise rigidly attached to it the lever 16, this lever being formed with an inwardly projecting head 17, which receives the end of the screw 15. It will be seen therefore that a rotation of the lever 16 will rotate the screw, 15, and that this rotation will act to force the strip

5 inward or to draw it outward. This is clearly shown in Fig. 4, the strip being guided in its movement by the guide irons 8 and 11.

5 Means should preferably be provided whereby each of the levers 16 may be held in position after the cinder strip has been forced inward into contact with the side and to this end I provide the staples, 18, each adjacent 10 to a lever 16. The levers may be linked to these staples by sealing wires, 19, which are afterward twisted and surrounded by the seals 20.

It will be seen from the description and 15 drawings that the cinder strip may be forced inward against the edge of the car to an extent which will absolutely preclude the possibility of the door 3 being opened without a reverse actuation of the screws, 20 15, and that thus the cinder strip and means for forcing it inward will form a locking means for the door, and that, hence, if the levers 16 are sealed in position, it will be impossible to open the door unless the seals 25 are broken.

While the cinder strip may be made with a flat inner edge, I prefer to make it with a slightly beveled or sharp edge which, when the strip is forced inward, will force itself 30 into the wood of the car siding and thus assist in absolutely preventing the withdrawal of the door so long as the cinder strip is in engagement with the siding.

I have shown two screw rods 15 and two 35 lever handles, 16, and four guides, but I do not wish to be limited to the number or arrangement shown, as I might use more or less of the screw rods 15 and the handles, and a greater or less number of the guides.

40 My invention is extremely simple, permits of a large range of adjustment for the cinder strip, permits the strip to be forced with great ease into the car siding or brought into close contact therewith along 45 its whole extent. The levers permit the screws to be easily operated and allow considerable power to be applied thereto to force the strip inward.

While I may use, as before remarked, one 50 or any number of the adjusting screws, 15, I believe a plurality of these screws to be best, as thereby one end of the strip may be

forced in farther than the other end, thus forcing the strip to conform to any warping or irregularity in the boards forming 55 the siding.

I have shown my weather strip as applied to the rear edge of a car door, but it is obvious that it might be applied to other edges thereof and that it is not necessarily 60 limited in use to the doors of railway cars, as it might be used on barn doors and other sliding doors.

Having thus described my invention, what I claim as new and desire to secure by Let- 65 ters-Patent, is:

1. The combination of a sliding door having inwardly-extending recesses in one of its side edges, guide members rigidly secured to the door in a position to cover the re- 70 cesses and having laterally-projecting arms extending across and spaced from the side edge of the door, a strip slidable between the said arms and side edge of the door, lugs projecting from one side of the strip and 75 extending into the recesses and movable back and forth therein, said lugs having tapped openings and screws rotatably mounted on the said guide members and threaded in the lugs for moving the strip 80 laterally from the said door.

2. The combination of a door, a plurality of spaced horizontally-disposed guide members having terminal arms extending laterally across and spaced from one of the ver- 85 tical edges of the door, a vertical strip slidable between the said edge of the door and arms and having recesses in its outer edges for accommodating the guide members, operating screws journaled in and extending 90 through the guide members and having at its inner end threaded engagement with the strip for moving the same back and forth between the said arms and vertical edge of the door, and a device on the other end of 95 the screw for turning the same.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN MINDOSIA JORDAN.

Witnesses:

W. J. ROBERTS,
G. P. DRINKARD.