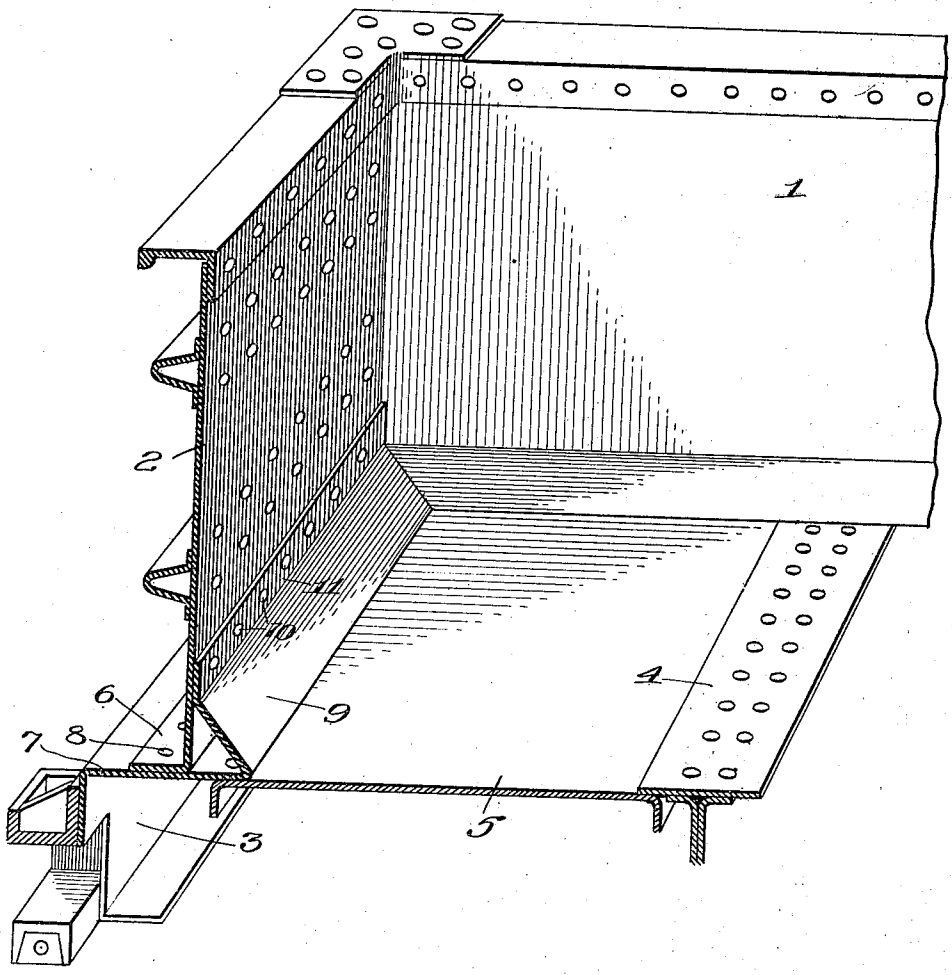
R. R. WEAVER.

CAR.

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UNITED STATES PATENT OFFICE.

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CAR.

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To all whom it may concern:

Be it known that I, ROBERT R. WEAVER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Cars, of which the following is a specification.

My invention relates more particularly to cars of the so-called drop bottom type, wherein the bottom of the car is formed, in part, of doors hingedly supported on the car structure to be swung from a position in which they close the bottom of the car for retaining therein the material filled into the car, into a position in which the material may be discharged from the car.

In cars of the type referred to, it is necessary that there be provided door-stops at the openings in the bottom of the car and at which the doors extend, for co-operation with the marginal edges of the doors to effect the desired closing of the openings when the doors are shut, and it is one of my objects to provide a one piece member which shall serve not only as an end-sill, but also as a door-stop for the edge of the door adjacent the end-sill, it being my object in this connection to improve upon structures as hitherto provided, to the end that the construction thereof may be simplified and be rendered less expensive and be highly satisfactory in operation. A further object is to provide a self-cleaning door-stop, so shaped that the material will not become lodged, and retained, thereon in the dumping operation; and other objects as will be manifest from the following description:

In the accompanying drawing, I have illustrated my invention by a perspective, longitudinal, sectional view taken through one end portion of a material-transporting car of the drop bottom type and embodying my improvement, the particular construction of car shown being formed of side-walls, a portion of only one thereof being shown at 1, end-walls a portion only of one of which is shown at 2, end-sills one only of which is shown at 3 and a series of cross members extending from side to side of the car and disposed in spaced relation between the end-sills and forming the open bottom of the car, one of these cross members being shown at 4, and doors, one only of which is shown at 5, which would be supported in any desirable way as is well known in the art, to co-operate with the openings provided in the bottom of the car between the end-sills and the cross members 4, the construction shown being one which is well known in practice, except as to the feature of forming the end-sill and a door-stop for one of the doors in accordance with my invention.

In the construction shown the end-sill 3 is formed of sheet metal bent to present the hollow structure shown and to which the adjacent walls of the car are connected in any suitable way, as for example, by flanging their lower edges as represented by the end-wall 2 as shown in the drawing, the flange provided on this end-wall, for the purpose stated, being represented at 6 and being secured to the upper horizontal portion 7 of the sill 3, as by riveting it thereto as represented at 8. The upper plate portion 7 of the sill 3 extends inwardly beyond the wall 2 to a position in which it overlaps the adjacent marginal edge of the door 5, and thence inclines upwardly, as represented at 9, toward the inner surface of the end-wall 2 to which the latter is rigidly secured, as by rivets 10 extending through this end-wall and through the upper flange portion 11 provided at the upper edge of the inclined portion 9.

The portion 9 is preferably of such inclination that in the discharging of the material from the car through the open bottom thereof, the material will not lodge thereon, whereby the structure is rendered self-cleaning.

It will be understood that the sill 3 will extend entirely across the end of the car and that the portion 9 which is located within the interior of the car will, by preference, extend the full width of the car at the inner side thereof, and thus where the car is provided with two parallel series of doors 5 arranged at opposite sides of the center line of the car, the door-stop portion referred to and shown as formed integrally with the sill 3, will co-operate with the rear edges of both of the adjacent end doors.

It will be noted that the providing of a combined end-sill and door-stop as explained not only permits of this portion of the car being constructed economically, but

it also aids in strengthening the structure and generally improves on such structures as hitherto provided.

While I have illustrated and described a particular embodiment of my invention, I do not wish to be understood as intending to limit it thereto, as the same may be variously modified and altered without departing from the spirit of my invention.

What I claim as new, and desire to secure by Letters Patent, is:

1. A car having an open bottom and a door cooperating therewith, the car being formed with a combined end-sill and door-stop.

2. A car having an open bottom and a door cooperating therewith, the car being formed with a combined end-sill and door-stop formed as an integral structure.

3. A car having an open bottom and a door cooperating therewith, the car being formed with a combined sheet metal end-wall and door-stop.

4. A car having an open bottom and a door cooperating therewith, the car being formed with a combined sheet metal end-wall and door-stop, formed as an integral structure.

5. A car having an open bottom and a door cooperating therewith, the car being formed with a member of sheet metal forming a hollow end-sill with its upper portion extended inwardly and forming a door-stop.

6. A car having an open bottom and a door cooperating therewith, the car being formed with a combined end-sill and door-stop, the upper surface of said door-stop portion inclining upwardly toward the inner surface of the end wall of the car.

7. A car having an open bottom and a door cooperating therewith, the car being formed with a member of sheet metal forming a hollow end-sill with its upper portion extended inwardly and forming a door-stop, having a portion inclining upwardly toward the inner surface of the end-wall of the car.

8. A car having an open bottom and side and end-walls, and a door co-operating with said open bottom, the car being formed with a member of sheet metal forming a hollow end-sill with its upper portion extended inwardly beyond the adjacent end-wall of the car to form a door-stop at the inside of the car, and formed with a portion which inclines upwardly toward the inner surface of said end-wall and is secured to said end-wall.

9. As an element of car-construction a combined end-sill and door-stop.

10. As an element of car-construction a combined end-sill and door-stop formed integrally.

11. As an element of car-construction a combined end-sill and door-stop of sheet metal.

ROBERT R. WEAVER.