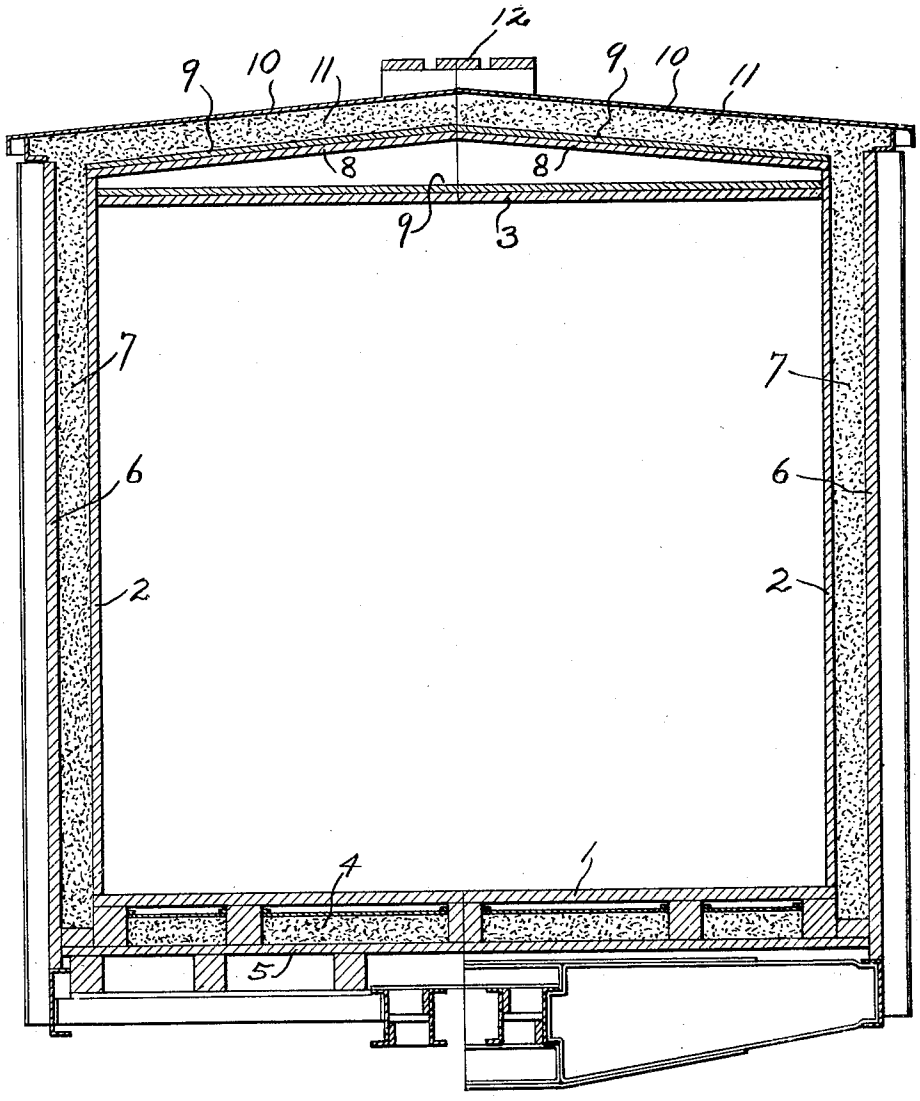
Dec. 22, 1931. A. C. MATHER 1,837,786

REFRIGERATOR CAR INSULATION

Filed Jan. 14, 1931



WITNESS

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Patented Dec. 22, 1931

1,837,786

UNITED STATES PATENT OFFICE

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REFRIGERATOR CAR INSULATION

Application filed January 14, 1931. Serial No. 508,689.

My invention relates to improvements in refrigerator car insulation in which the vertical walls of the car will be retained well insulated throughout the life of the car; and the objects of my improvement are, first, to automatically refill the vertical walls of a car with insulation material; second, to store an extra quantity of insulation material in the car without enlarging the car or decreasing the capacity of the car; third, to make an efficient, simple and durable construction and other features to become apparent from the description to follow.

Refrigerator cars are built with all six walls hollow which hollow spaces are filled with any suitable insulating material usually in granulated form. After a car has been in use for some time the unavoidable jarring and rumbling of the car will cause the granulated insulating material in the vertical walls to pack down and settle to such extent that the upper portions of all four vertical walls are devoid of insulating material and the efficiency of the car is considerably lowered. By the use of my invention the vertical walls of the car are at all times kept entirely filled with the insulating material and the highest efficiency of the car is retained throughout the life of the car.

To describe my invention so that others versed in the art to which it pertains can make and use the same I have illustrated it on the accompanying sheet of drawing forming a part of this specification and in which:

The figure shows a cross sectional view of a refrigerator car embodying my invention. Similar numerals refer to similar parts throughout.

The floor of the car is shown at 1, the vertical walls at 2 and the ceiling at 3. Suitable insulation 4 fills the space between the floor 1 and a lower floor 5. The outer vertical walls 6 are spaced from the walls 2 to form hollow spaces which are filled with any desired insulation material 7, preferably a granulated substance. Above the ceiling 3 is constructed an inclined partition 8 which slants from a high point in the middle of the car to a low point at the upper end of the vertical walls 2. The ceiling 3 as well as the partition 8 is covered with a layer of balsam wood or balsam wool 9 to serve as insulation. The roof 10 is of the usual construction and is spaced from the partition 8 to form hollow spaces which are filled with granular insulation 11. The running board is shown at 12. As fast as the insulation material 7 between the walls 2 and 6 packs down and settles, the granular material 11 will gravitate down the inclined partition 8 and onto the material 7 thus constantly keeping the vertical hollow spaces between the walls 2 and 6 full.

Thus it is clear that the use of my invention will always keep the hollow vertical walls of a car full of insulating material no matter how long the car is in use. The quantity of material stored between the partition 8 and the roof 10 is more than sufficient to keep the vertical hollow spaces filled.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a refrigerator car, hollow vertical walls filled with insulating material and means for storing a supply of insulating material above said walls in such manner that it will gravitate in the hollow of the walls.

2. In a refrigerator car, hollow vertical walls filled with insulating material and means for supplying additional insulating material at the top of the hollow walls as fast as the material settles.

3. In a refrigerator car, hollow vertical walls filled with insulating material and inclined hollow spaces communicating with the top of said hollow walls filled with granulated insulating material whereby the hollow vertical walls will constantly be filled with insulating material.

Signed at Los Angeles, California, this 5th day of January, 1931.

ALONZO C. MATHER.