

G. C. BOHN.
REFRIGERATOR CAR.
APPLICATION FILED JUNE 21, 1909.

1,058,695.

Patented Apr. 8, 1913.
3 SHEETS—SHEET 1.

Fig. 1

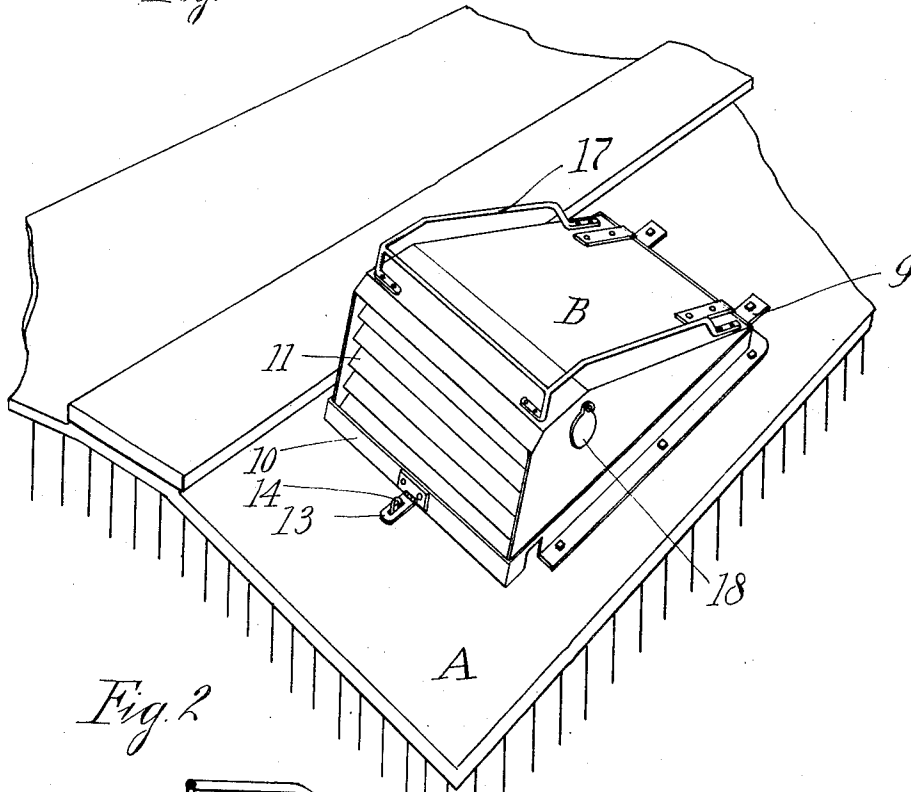
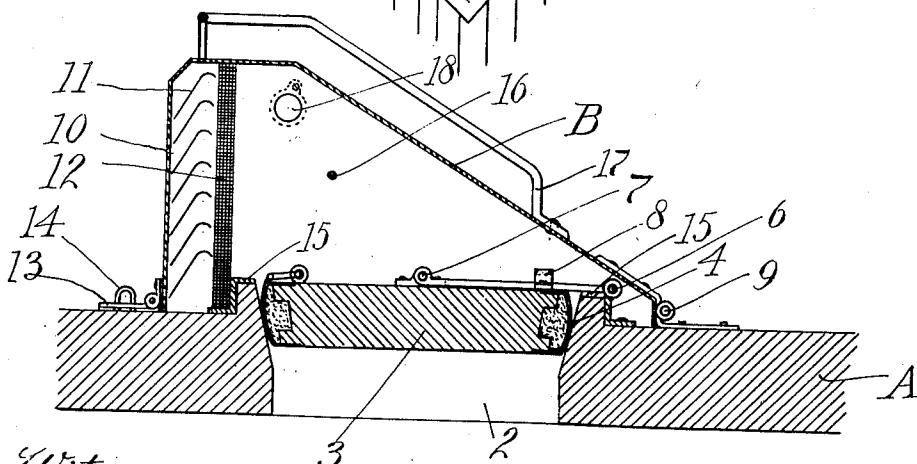


Fig. 2

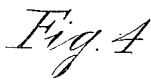
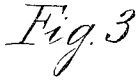


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3 SHEETS--SHEET 2.



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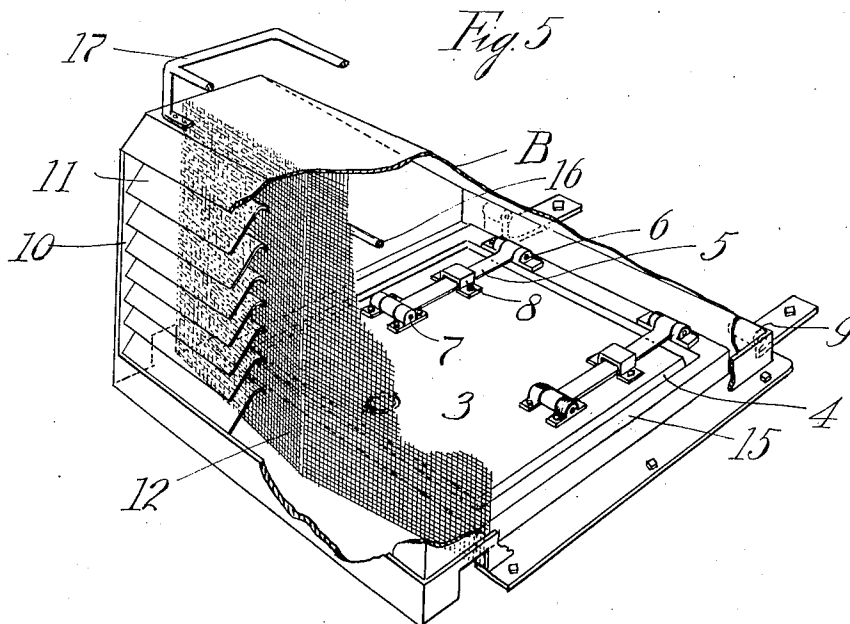
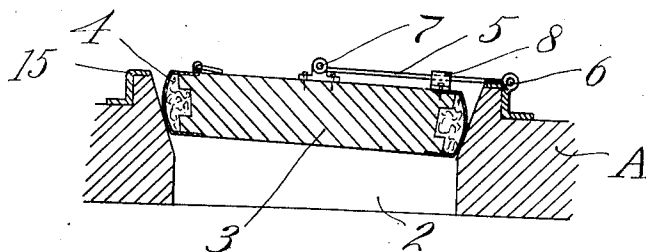


Fig. 6



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UNITED STATES PATENT OFFICE.

GEBHARD C. BOHN, OF ST. PAUL, MINNESOTA.

REFRIGERATOR-CAR.

1,058,695.

Specification of Letters Patent.

Patented Apr. 8, 1913.

Application filed June 21, 1909. Serial No. 503,365.

To all whom it may concern:

Be it known that I, GEBHARD C. BOHN, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Refrigerator-Cars, of which the following is a specification.

My invention relates to improvements in refrigerator cars, its object being particularly to provide an improved form of ventilating cover for the ice opening of a refrigerator car in connection with an improved form of cooperating closure for the opening.

To this end my invention consists in the features of construction, combination and arrangement of parts hereinafter particularly described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a perspective view of one end of the roof of a refrigerator car fitted with my features of invention; Fig. 2 is a longitudinal vertical section; Fig. 3 is a similar section with the hood and closing plug partly opened; Fig. 4 is a similar view with the hood and plug turned back upon the roof of the car; Fig. 5 is a perspective view of the hood and plug partly broken away, and Fig. 6 is a vertical section through the plug and adjacent portion of the car roof.

In the drawings A represents the roof of the car formed with an ordinary opening 2 through which ice may be fed into the ice chamber. The opening 2 is closed by a suitable plug 3 which in the drawings is shown with a resilient edging 4 of felt or other suitable material. The plug has pivotal connection at one end with a butt 6 upon the car roof and at the other end with a butt 7 secured approximately to the center of the plug. Each hinge strap intermediately passes through a collar 8 secured to the plug, the collar being large enough to permit some play between it and the strap.

Covering the ice opening is a hood B having hinge connection 9 at one side to the car roof. The free end wall 10 of the hood is formed with a plurality of superimposed siphon shaped ports 11 with the longer legs of said ports opening to the outer air and the inner ends of the ports into the hood. Arranged within the hood adjacent to the inner ends of the ports is a vertical wall 12 of suitable screening material to prevent the passage of cinders, etc., into the hood. The

hood is adapted to be secured at its free end to the roof of the car by means of a latch 13 cooperating with a staple 14 secured to the car roof. The ice opening 2 is surrounded by an upwardly extending flange 15 to the rear side of which is connected the butts 6 of the plug supporting hinges. The outer wall of the flange of the ice opening constitutes a bearing for the front wall 11 of the hood, as shown in Fig. 2.

In order to secure the plug in raised position within the hood I provide the rod 16 extending horizontally through the hood and supported within openings in the side wall of the hood. With the hood in open position against the roof of the car and the plug turned back to lie upon the hood, as shown in Fig. 4, the carrying of the hood to closed position will cause the plug to pass above the rod, as indicated in Fig. 3, so that when the hood is entirely closed the plug will be held in supported position underneath the top of the hood leaving the ice opening open and allowing the free circulation of air through the car. If it is desired to close the plug it will be turned upon its hinges into closed position while the hood is open. The hood is provided with suitable handles 17 to facilitate turning it to open position and with suitable trap closed openings 18 to allow the hood to be looked into.

In operation a plurality of hoods will be employed, one or more upon each end of the car roof, with the open work end wall facing the adjacent end of the car. Consequently with the plugs open and the hoods closed the traveling of the car will cause the air to pass into the hoods at the forward end of the car and through the car and out through the hoods at the rear end, thus maintaining a constant circulation of air. The ported end wall with the interior vertical screening wall 12 will allow a free circulation of air and will at the same time prevent the passage of cinders etc. into the hoods.

I claim as my invention:

1. In combination with a refrigerator car formed with an opening in its roof toward one end, a plug removably fitted in said opening, an openwork covering hood for said opening movably supported upon the car, and means for supporting the plug from said hood.

2. In combination with a refrigerator car formed with an opening in its roof, a plug

removably fitted to said opening, a ventilating hood covering said opening and movably supported upon the car roof, and means adjustably supporting said plug from said hood.

3. In combination with a refrigerator car formed with an ice opening, a hinged plug fitted to said opening, an open work covering hood therefor, and means for supporting said plug from said hood.

4. In combination with a refrigerator car having an ice opening, a hinged plug fitted thereto, a hinge supported open work covering hood therefor, and means detachably supporting said plug from said hood.

5. In combination with a refrigerator car having an ice opening in its roof toward one end, an openwork hood covering the same and movably supported upon the car roof, a plug fitted to said opening and hinge means centrally supporting said plug from said hood.

6. In combination with a refrigerator car having an ice opening, an open work hinged covering hood therefor, a plug fitted to said opening inside said hood, and hinge means centrally supporting said plug, for the purpose set forth.

7. In combination with a refrigerator car having an ice opening, an open work hinged hood therefor, a plug fitted to said opening, hinge means centrally supporting said plug, and means interiorly carried by said hood for detachably supporting said plug.

8. In combination with a refrigerator car formed with an opening in its roof toward the end thereof, a closure for said opening, a hood movably supported upon the roof of said car and surrounding the opening and closure, a vertical screen wall forming the outer end of said hood, a plurality of downwardly directed ports upon the outer side of said screen wall whereby to constitute water sheds for inflowing air.

9. In combination a refrigerator car formed with an opening in its roof, a hinged plug fitted thereto, a hinge supported ventilating covering hood therefor, and means detachably supporting said plug from said hood.

In testimony whereof I affix my signature in presence of two witnesses.

GEBHARD C. BOHN.

Witnesses:

H. S. JOHNSON,
H. SMITH.