

No. 661,429.

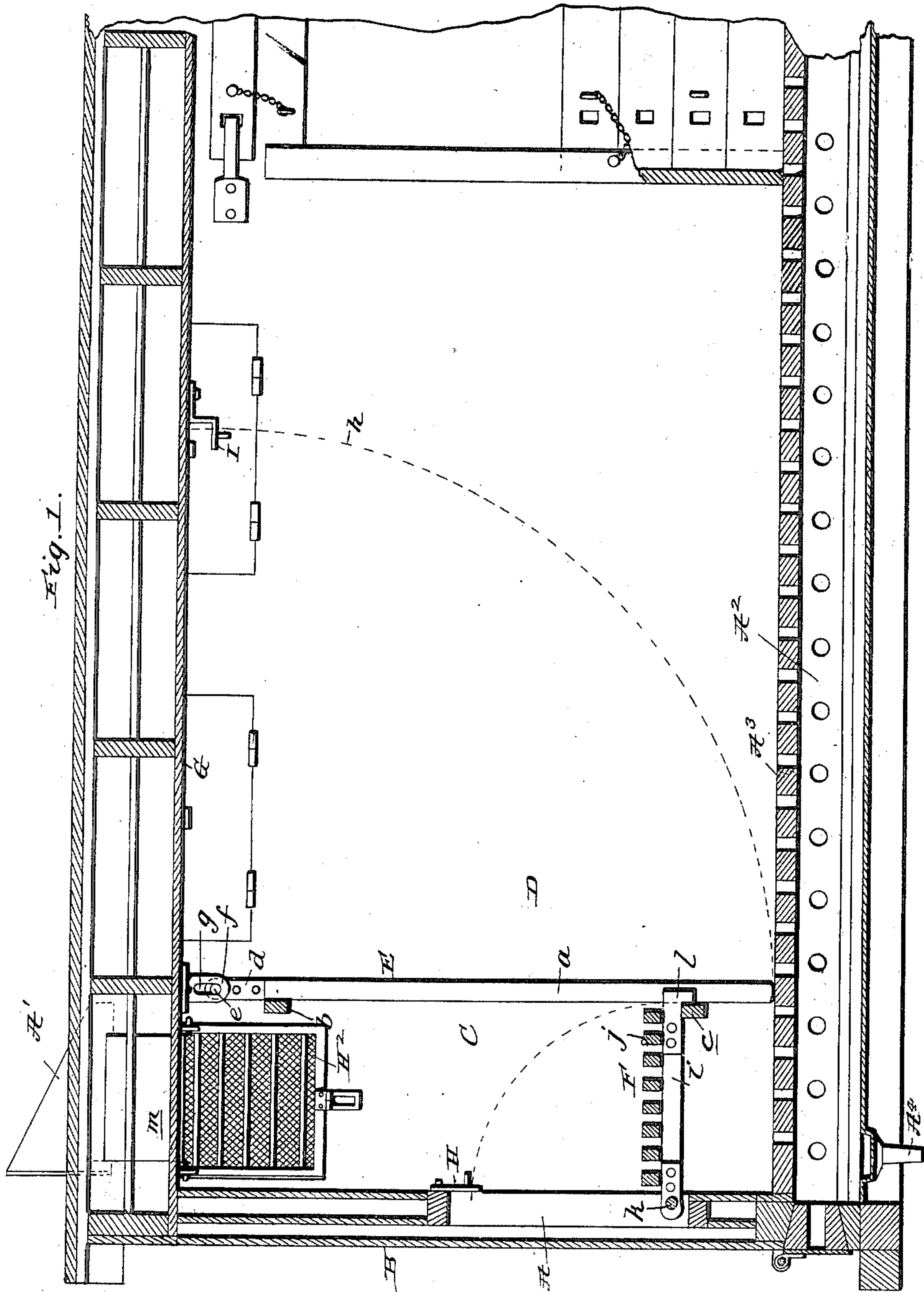
Patented Nov. 6, 1900.

H. F. STANLEY.
REFRIGERATOR CAR.

(Application filed Feb. 15, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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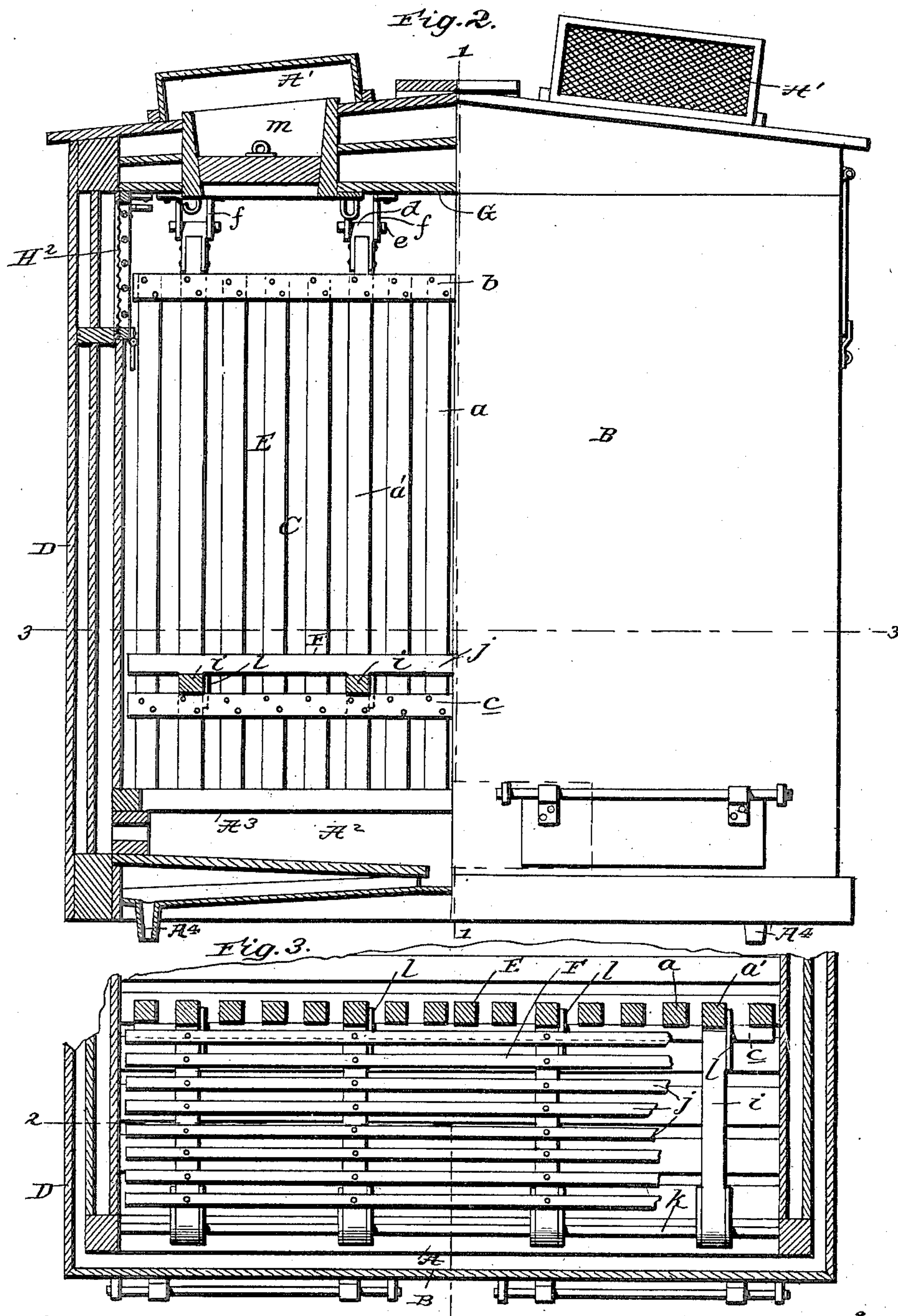
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witnesses:
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UNITED STATES PATENT OFFICE.

HENRY F. STANLEY, OF NEW ORLEANS, LOUISIANA.

REFRIGERATOR-CAR.

SPECIFICATION forming part of Letters Patent No. 661,429, dated November 6, 1900.

Application filed February 15, 1900. Serial No. 5,368. (No model.)

To all whom it may concern:

Be it known that I, HENRY F. STANLEY, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented new and useful Improvements in Refrigerator-Cars, of which the following is a specification.

My invention relates to cars, and is designed more particularly as an improvement upon the refrigerator-car disclosed in my Letters Patent No. 602,483, of April 19, 1898.

It has for its general object to provide a car with an ice-receptacle embodying such a construction that certain of its walls are adapted to be adjusted against the top and end walls of the car-body when freight requiring no refrigeration is to be carried, so as to increase the capacity of the car.

With the foregoing in mind the invention will be fully understood from the following description and claims when taken in conjunction with the accompanying drawings, in which—

Figure 1 is a longitudinal central section of so much of a car-body as is necessary to illustrate my present invention, said section being taken in the plane indicated by the broken line 1 1 of Fig. 2. Fig. 2 is a view, partly in end elevation and partly in transverse section, the section being taken in the plane indicated by the line 2 2 of Fig. 3. Fig. 3 is a detail horizontal section taken in the plane indicated by the broken line 3 3 of Fig. 2.

Similar letters designate corresponding parts in all of the views of said drawings.

The car-body illustrated is constructed generally in accordance with the invention forming the subject-matter of my aforesaid Letters Patent, with the exceptions that it is provided with one or more ventilators A' at its top, and in lieu of having an ice-chamber at its bottom has an air-space A² of less height than the ice-chamber, which is designed to afford a draft underneath the floor and render unnecessary the employment of the temporary floor-racks which are now generally used in order to enable air to circulate under dry perishable freight. Said body may, however, be of any suitable construction, pro-

vided it has a recess A in its end wall B, as best shown in Fig. 1.

C is my improved ice holder or receptacle, which is arranged at one end of the car and is formed by the end and side walls B D of the car-body, an adjustable transverse wall E, and an adjustable bottom wall F, as shown.

The transverse wall E of the ice-receptacle is preferably composed of a plurality of upright bars *a a'*, arranged about the proportional distance illustrated apart, an upper cross-bar *b*, and a lower cross-bar *c*. The upright bars *a'* are extended above the upper cross-bar *b* and are provided at their upper ends with castings *d*, having lateral lugs *e*. These castings are interposed between hangers *f* on the top wall G of the car-body, and their lugs are journaled in slots *g* in said hangers, so as to permit of the wall E being swung up against said top wall G after the manner indicated by the curved broken line in Fig. 1.

The bottom wall F of the ice-receptacle is preferably made up of a plurality of longitudinally-disposed bars *i* and transverse slats *j* laid upon and connected to the same. The bars *i* are arranged about the proportional distance illustrated apart and are of such length as to permit of the bottom wall F being swung up into the recess A in the end wall of the car. They are pivotally mounted at one end on a transverse rod *k*, arranged adjacent to the lower end of said recess, and are provided at their opposite ends with hooks *l*, which are adapted, when the parts are in the position shown in Fig. 1, to rest over the cross-bar *c* of the wall E, and thereby securely connect said wall E to the bottom wall F and hold both walls against casual movement.

H is a pivoted latch connected to the end wall of the car and adapted to engage the bottom wall F when the same is adjusted into the recess A and hold it in said recess, and I is a latch pivotally connected to the top wall of the car. This latter is designed to be placed in engagement with the wall E of the ice-receptacle C when said wall is swung up against the top wall G of the car and retain it against casual movement from such position.

In the practical operation of my invention

when freight requiring refrigeration is to be carried the walls E and F are adjusted to the positions shown in Fig. 1 and ice is placed in the receptacle C thus formed through an opening *m* in the top wall of the car.

Ice may be readily removed from the receptacle C, and the walls E F may be quickly and easily secured against the top and end walls, respectively, of the car-body. From this it follows that the car may be expeditiously gotten ready for the transportation of dry perishable freight (such as bananas) which is shipped without ice and may as readily be reconverted into a refrigerator-car when desired. It will also be observed that when the walls E F are secured against the walls of the car-body the capacity of the car is very materially increased, which is an important advantage.

When the car is used to transport dry perishable fruit or other freight, the ventilator or ventilators on the top of the car are left open, and the screen H² (shown in Fig. 1 as hung on the side wall of the car-body) is placed below the inner end of the hatchway or opening *m* and is suitably connected to the roof of the car in order to effectually prevent access being gained to the interior of the car through said opening *m*.

With the ventilators open, as above stated, air is free to circulate between the floor A³ and the bottom of the car through said floor and through the interior of the car and the freight contained therein, with the result that deterioration of such freight is effectually prevented.

By virtue of the floor A³ being foraminated the drip water from the ice in the receptacle C is enabled to quickly pass through said floor and into the space A² between the same and the bottom of the car-body, and hence is effectually prevented from damaging the freight supported on the floor. In the event of the drain-pipes A⁴, which communicate with and lead from the space A², becoming choked, as frequently happens, the water will be held in space A² and prevented from damaging the freight on the floor A³.

I prefer in practice to arrange one of my improved receptacles C at each end of the car; but as the construction of said receptacles is identical I have deemed it unnecessary to illustrate more than one.

It will be appreciated from the foregoing that my improvements are very simple and practical and add but little to the cost of the car. It will also be observed that when the walls E F are adjusted to and secured in their inoperative positions they are entirely out of the way and do not take up any part of the interior of the car.

Having thus described my invention, what I claim is—

1. In a freight-car, the combination with the top, end and side walls of the car-body; of a transverse wall connected in a hinged

manner to the top wall whereby it is adapted, when not in use, to be swung against the same, a bottom wall connected in a hinged manner to the end wall whereby it is adapted, when not in use, to be swung up against said end wall, said bottom wall being provided with hooks for engaging and holding the transverse wall when both walls are in their operative positions, means for holding the bottom wall when said wall is swung up against the end wall of the body, and means for holding the transverse wall when the same is swung up against the top wall, substantially as specified.

2. In a car, the combination with the top, side and end walls of the car-body, the top wall having slotted hangers *f*, and the end wall having a recess A; of the adjustable, transverse wall comprising upper and lower cross-bars, upright bars *a a'* arranged at intervals apart and connected to the cross-bars, and castings on the upper ends of the bars *a'* having lugs *e* journaled in the slotted hangers *f*, whereby said transverse wall is adapted to be swung and moved endwise, the adjustable bottom wall adapted to swing independently of the transverse wall, and comprising longitudinally-disposed bars pivotally mounted at one end on a transverse rod in the lower portion of the recess A and having hooks at their opposite ends adapted to engage the lower cross-bar of the transverse wall, a latch on the top wall for engaging the transverse wall, and a latch on the end wall for engaging the adjustable bottom wall, substantially as specified.

3. In a car, the combination with the car-body having one or more ventilators at its top, and also having a foraminated floor, an air-space between said floor and its bottom; and a drain-pipe communicating with the air-space; of an adjustable, transverse wall connected in a hinged manner at its upper end to the top wall of the body, an adjustable bottom wall connected in a hinged manner to the end wall of the body and adapted to swing independently of the transverse wall, means on one of the adjustable walls for engaging and holding the other when said walls are in their operative positions, means for holding the transverse wall when the same is swung against the top wall of the body, and means for holding the bottom wall against the end wall of the body, substantially as specified.

4. In a car, the combination with the top, side and end walls of the car-body, the end wall having a recess in its inner side; of a transverse wall connected in a hinged manner to the top wall whereby it is adapted, when not in use, to be swung against the same, a bottom wall connected in a hinged manner to the end wall whereby it is adapted, when not in use, to be swung into the recess in said end wall; said bottom wall being provided with hooks for engaging and holding

the transverse wall when both walls are in
their operative positions, means for holding
the transverse wall when the same is swung
against the top wall of the body, and means
5 for holding the bottom wall in the recess in
the end wall of the body, substantially as
specified.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

HENRY F. STANLEY.

Witnesses:

LOUIS EBERT,
W. P. KILLELEA.