

(No Model.)

C. S. HARDY.  
REFRIGERATOR CAR.

No. 577,748.

Patented Feb. 23, 1897.

Fig. 1.

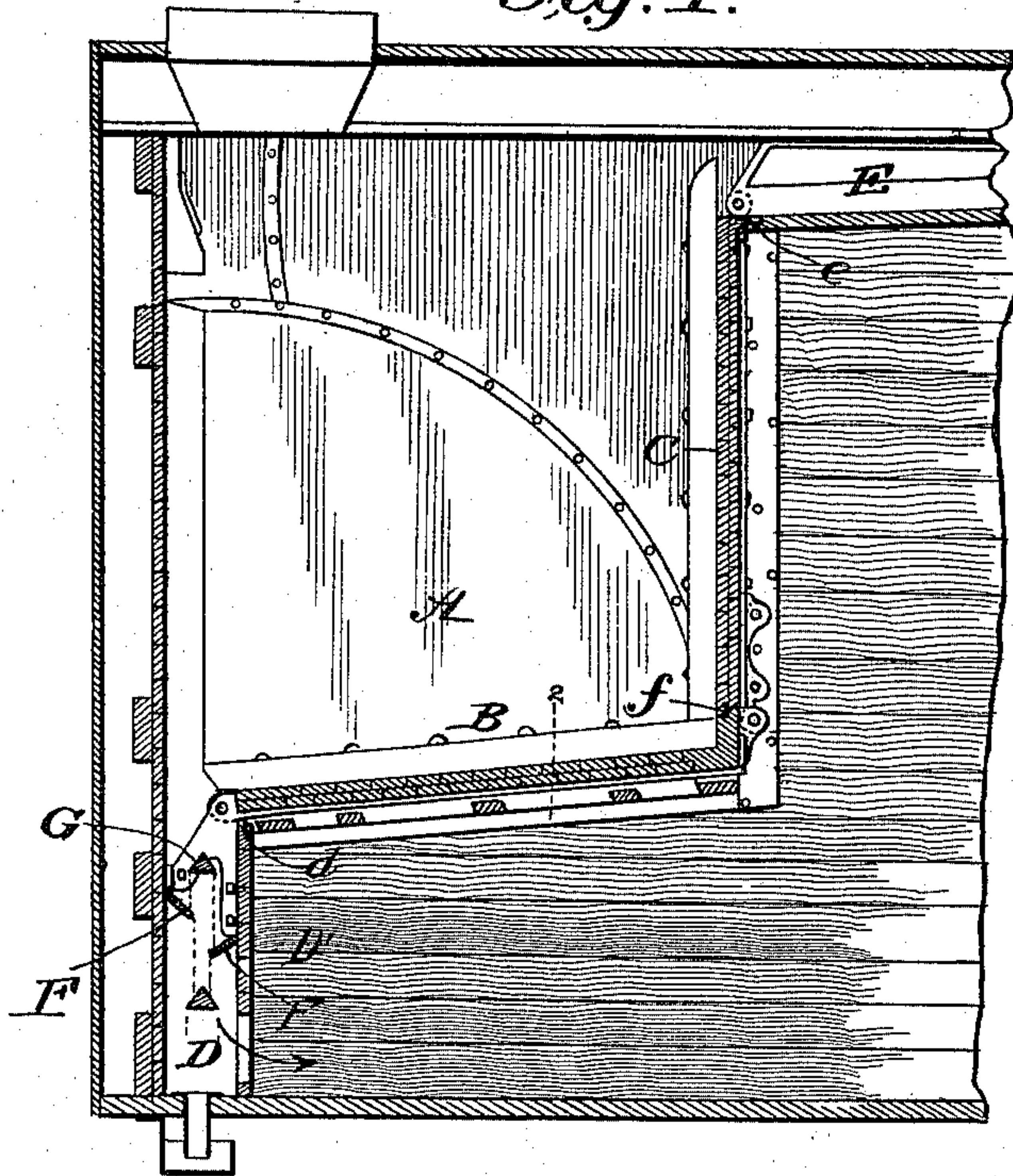


Fig. 2.

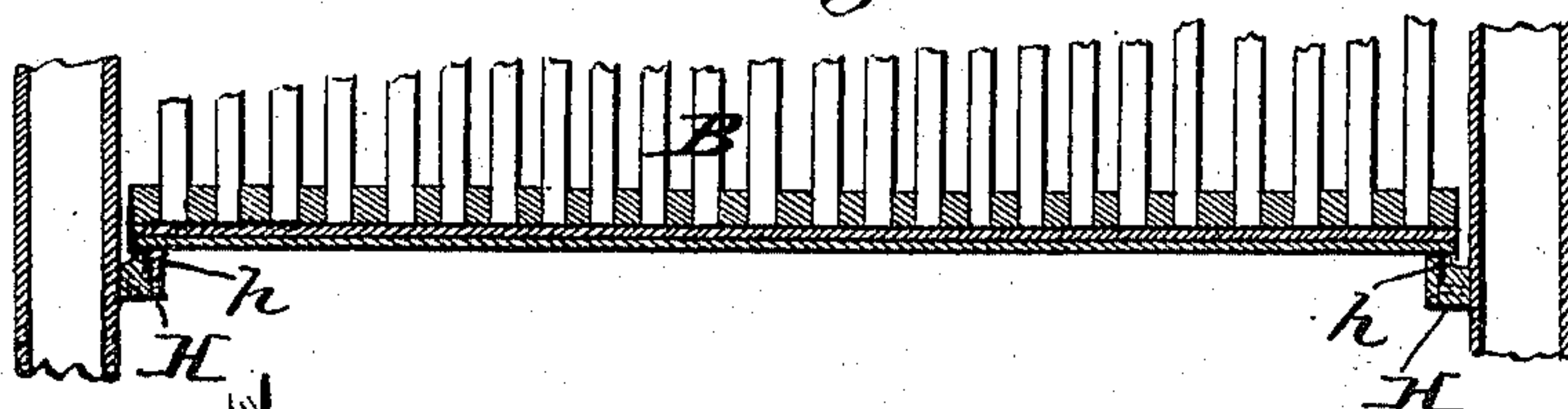


Fig. 3.

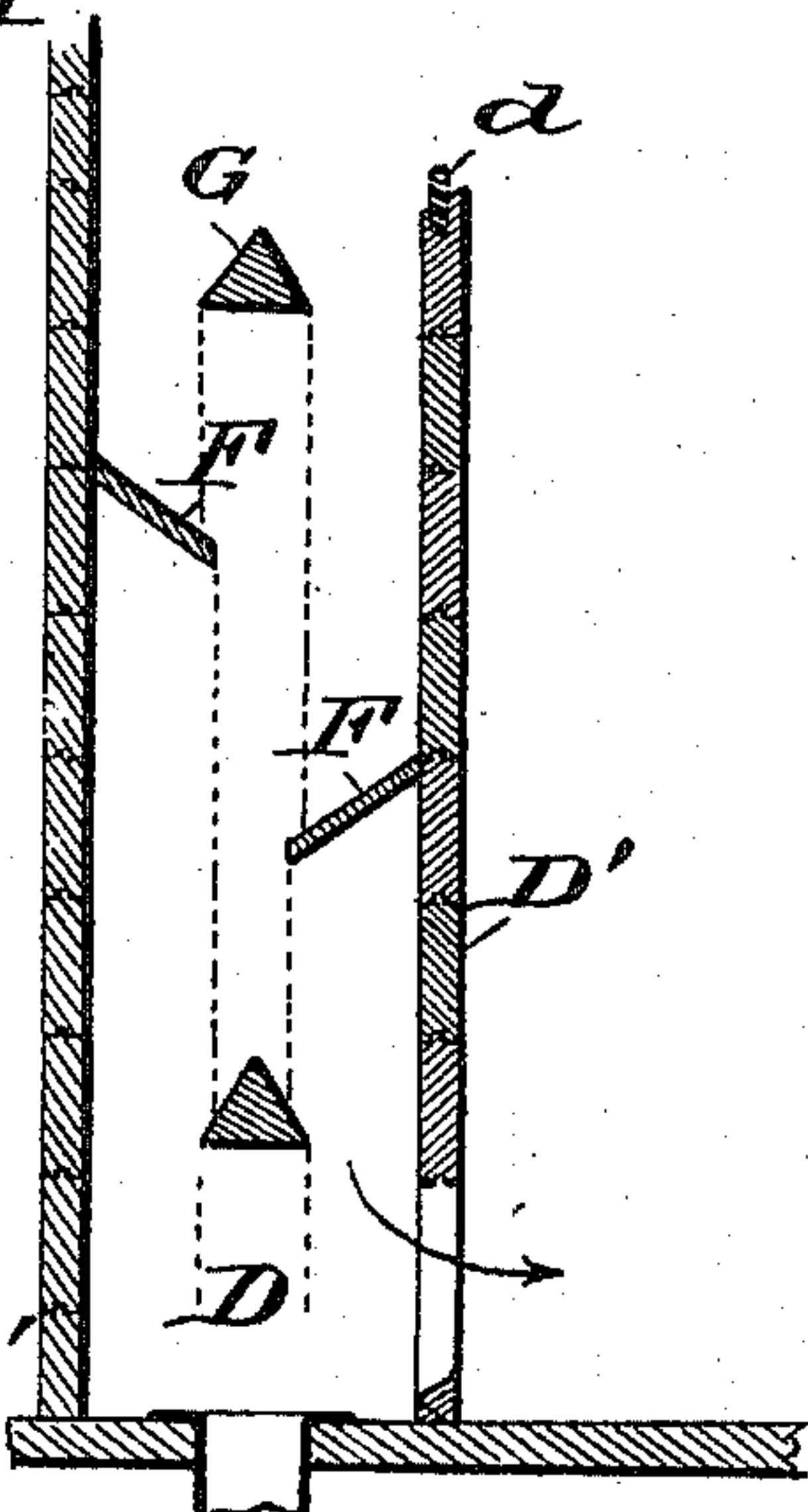
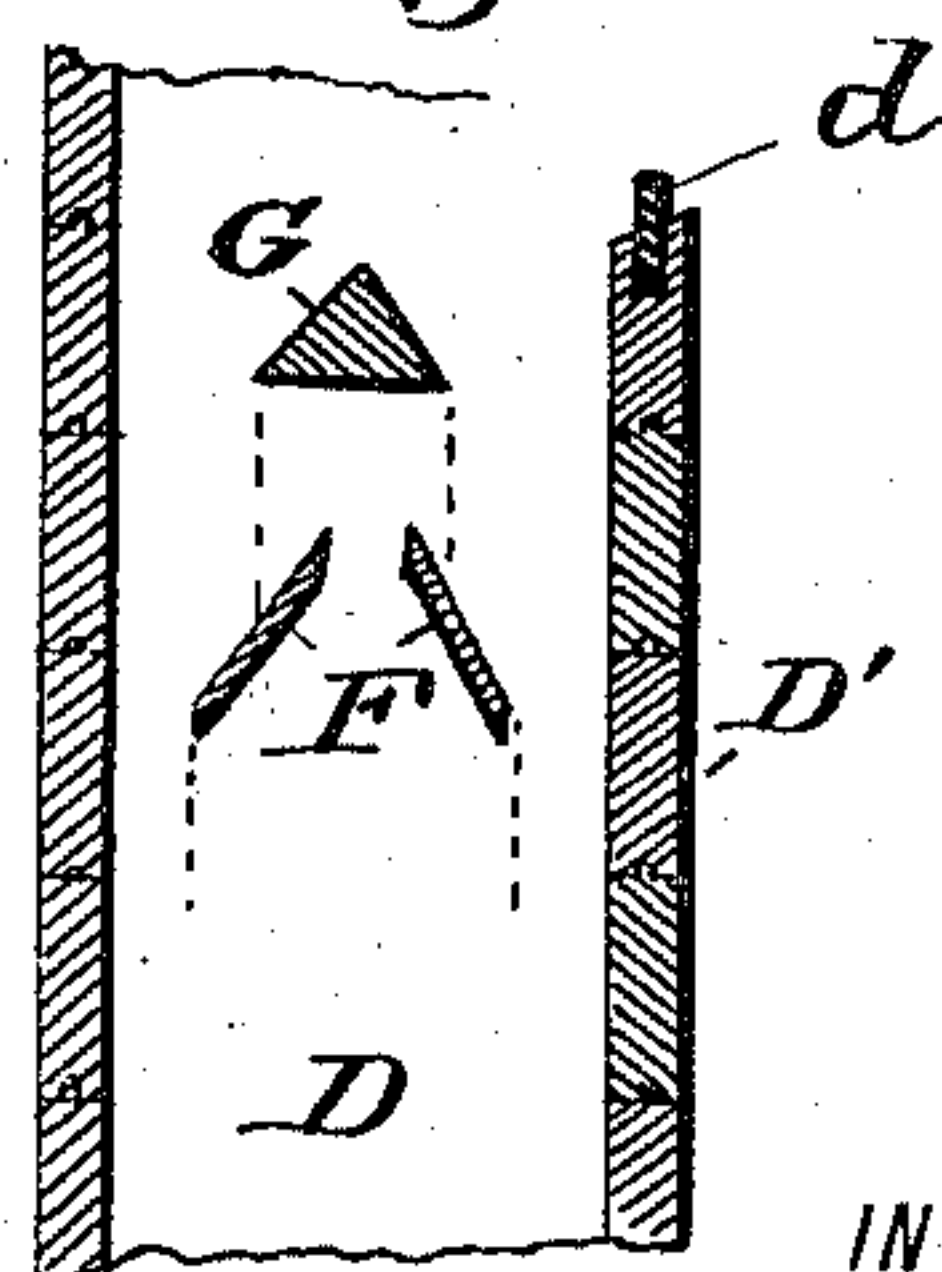


Fig. 4.



WITNESSES:

Jos. A. Ryan  
P. B. Furpin

INVENTOR

Charles S. Hardy.

BY Munn & Co.,

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

CHARLES S. HARDY, OF SAN DIEGO, CALIFORNIA.

## REFRIGERATOR-CAR.

SPECIFICATION forming part of Letters Patent No. 577,748, dated February 23, 1897.

Application filed May 6, 1896. Serial No. 590,440. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES S. HARDY, of San Diego, in the county of San Diego and State of California, have invented a new and useful Improvement in Refrigerator-Cars, of which the following is a specification.

My invention is an improvement in refrigerator-cars, and particularly in that class of such cars having folding ice-receptacles; and the present invention has for objects, among others, to provide improvements in the packing of the folding parts of the ice-receptacle and in the spatter devices of the drain-flue; and the invention consists in certain novel constructions, combinations, and arrangements of parts, as will be hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is a vertical longitudinal section of a car provided with my improvements, parts being broken away. Fig. 2 is a cross-section on about line 2 2 of Fig. 1. Fig. 3 is a detail enlarged section of the drain-flue; and Fig. 4 illustrates a modified arrangement of the improved spatter devices.

The ice-receptacle A has the hinged bottom or floor section B and the hinged side section C, the section B connecting with the drain-flue D and the section C with the draft-flue E. The part A is an ice-receptacle, and the floor and side sections are hinged so they can be adjusted to form the ice-receptacle, when desired, or be folded up out of the way. The drain-flue has its inner wall D' provided at its upper end with a packing-strip *d*, of rubber or other suitable flexible material, which strip extends from side to side of the drain-flue and forms a packing between the floor-section B of the ice-receptacle and the drain-flue, so such parts will be sealed at their meeting point or juncture by the weight of the floor B and by internal pressure received from ice when in use as a refrigerator. A packing-strip *f*, of rubber or the like, is arranged to seal the joint between the floor B and the wall C.

At the juncture of the ice-receptacle with the draft-flue E, I provide a packing-strip *e*, of rubber or other suitable flexible material, such strip being supported in and extended from side to side of the ceiling forming such draft-flue. This packing serves to seal the joint between such draft-flue and the wall-

section C of the ice-receptacle and is aided by internal pressure received from ice when used as a refrigerator.

In forming the drain-flue of an ice-receptacle it is desirable to concentrate the flue into the smallest possible space, gain as much space as possible for the passage of air, and to so arrange spatter devices that the drippings from ice in the receptacle will not fall directly to the floor and spatter out into the car, and that such devices will offer the greatest freedom to the passage of the air.

In the present arrangement of spatter devices I provide the side sections or deflectors F and the intermediate deflector or section G. The deflectors F project alternately from the opposite sides of the flue, but terminate at their inner ends short of the middle of such flue or a line drawn vertically between the inner ends of such side deflectors. In line with the space between these side deflectors I arrange the intermediate deflector G, preferably tapered, as shown, and which serves to close the vertical space between the inner edges of the side deflectors. By this arrangement of side and intermediate deflectors the air is not caused to rise, nor is it retarded, and there is nothing but declining surfaces to obstruct the passage of air.

In Fig. 4 I show a somewhat-modified arrangement of the side and intermediate deflectors which may be used in some instances, but ordinarily I prefer the construction shown in Fig. 3.

By means of the packing-strips *d* and *e*, the strips *h* on the cleats H, as best shown in Fig. 2, each part of the folding ice-receptacle will rest upon packing material at all its outer edges and become sealed by its own weight and the interior pressure received from ice when in use as a refrigerator.

It will be understood that the side section C is sealed against its cleats in substantially the same manner as the bottom B is sealed at *b*, as shown in Fig. 2.

It should be understood that to obtain perfect results from refrigeration it is necessary to have the ice-receptacle not only air-tight, but water-tight as well, at all points except where openings are left, except the inlet and discharge.

Having thus described my invention, what

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

1. An ice-receptacle composed of hinged sections and provided with a drain-flue at its lower or discharge end, the partition forming such drain-flue being provided with rubber or other flexible material at its upper or inlet end, in such a manner that the floor of the ice-receptacle will seal itself to the drain-flue by its own weight, substantially as set forth and described.

2. The combination of the ice-receptacle having a hinged floor-section, a drain-flue arranged at its upper end to be abutted by said section and a sealing-strip sealing the joint between said parts substantially as shown and described.

CHARLES S. HARDY.

Witnesses:

CHAS. KAUFFMAN,  
FRANK S. BANKS.