(No Model.)

H. F. STANLEY.

CAR VENTILATION.

No. 586,939. Patented July 20, 1897.

Fig. 1.

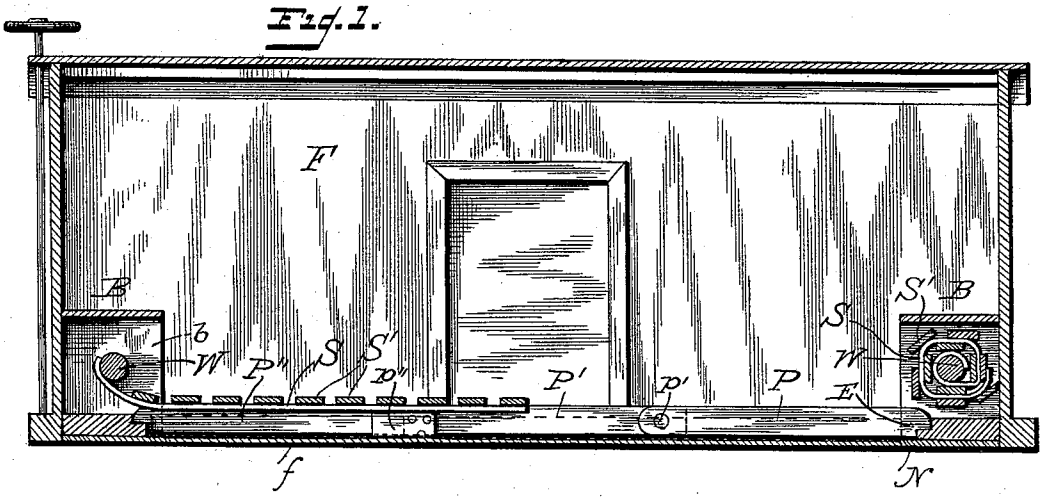


Fig. 2.

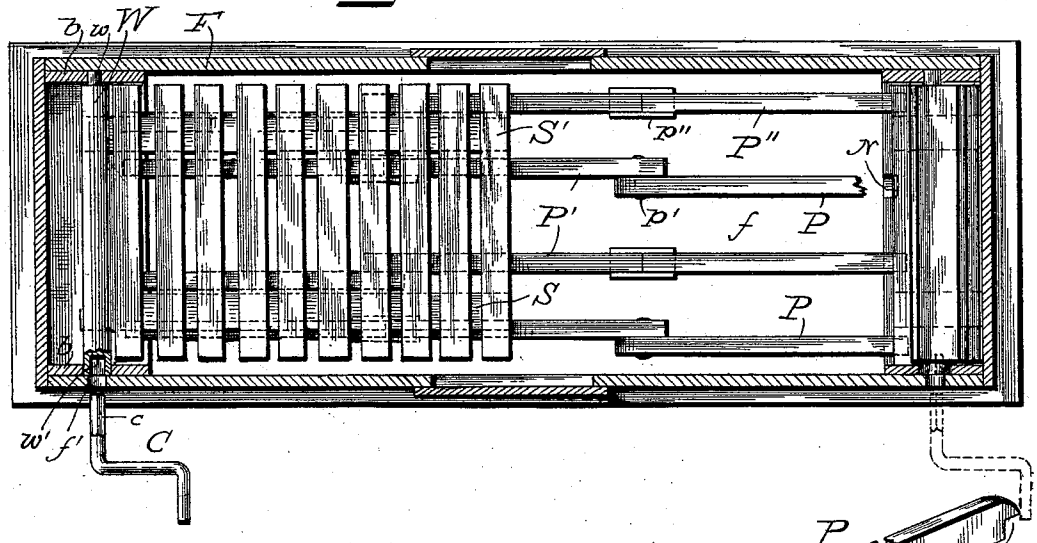
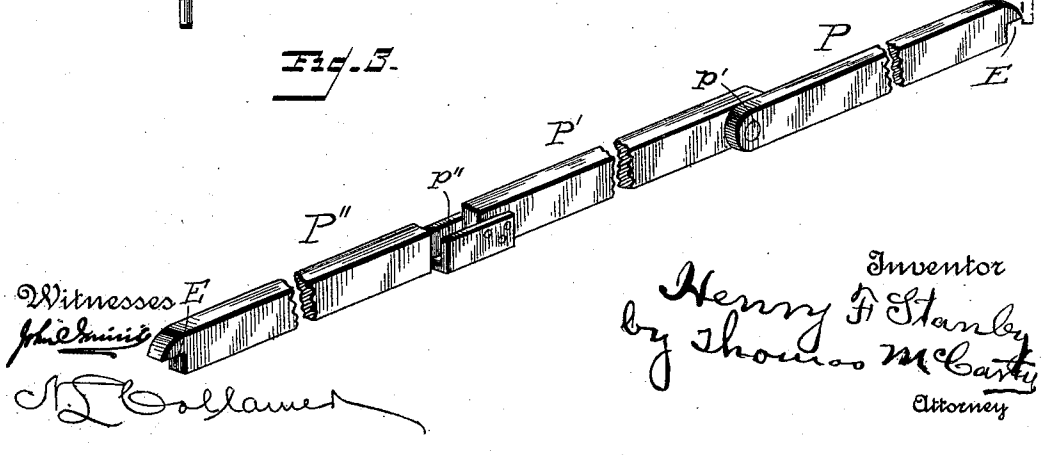


Fig. 3.



Witnesses
E. [illegible]
[illegible]

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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

HENRY F. STANLEY, OF NEW ORLEANS, LOUISIANA.

CAR VENTILATION.

SPECIFICATION forming part of Letters Patent No. 586,939, dated July 20, 1897.

Application filed May 7, 1896. Serial No. 590,598. (No model.)

To all whom it may concern:

Be it known that I, HENRY FREDERICK STANLEY, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented certain new and useful Improvements in an Adjustable Ventilated Car-Floor for Perishable Freight; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to railway rolling-stock, and more especially to freight-cars for carrying fruit and the like; and the object of the same is to produce an attachment for ordinary freight-cars whereby they will be adapted for the reception of perishable fruit.

To this end the invention consists in boxes located in the opposite ends of the car and each containing a windlass or shaft whereon are wound endless belts connected by slats, the latter being adapted to be drawn outward from the boxes over sills which are removably held upon the car-floor. The construction of the same is described in the following specification and illustrated in the drawings hereto attached, and in which—

Figure 1 is a longitudinal section of a freight-car constructed in accordance with my invention. Fig. 2 is a horizontal section thereof. In both of these views one set of slats is withdrawn or unwound from its box or casing and the other is contained therein. Fig. 3 is a perspective detail showing one of the removable sills with its parts slightly separated.

Referring to the said drawings, the letter F designates an ordinary freight-car, here shown as having a footway along its top, a brake, and side doors, although these parts bear no letters of reference, since their construction is well known in the art. The body of the car is provided with a rigid flooring *f* of any approved construction.

Coming now more particularly to the present invention, the letters B designate boxes or casings, the bottoms of which rest upon and form transverse strips across the floor of the car, one of which is secured in each lower endmost corner of the car F, and each box contains a windlass or shaft W, having trunnions *w* journaled in the ends of the box proper, and one of which, *w'*, stands opposite an opening *f'* in the side of the car and is provided with an angular axial opening adapted to receive the squared end *c* of the crank-handle C, as clearly shown in Fig. 2. By this construction the crank can be removably inserted in the trunnion of the windlass, and the latter can be turned in either direction at will, after which the crank can be removed, as will be clearly understood. Attached to said windlass or shaft W are two or more flexible straps S, connected by transverse slats S', which may be of wood or other suitable material, the length of each strap S being sufficient when unwound from the windlass-shaft W to extend therefrom to a point about midway of the length of the car F, as seen in the drawings. This series of slats is unwound by grasping the outermost and drawing upon the same, and it is rewound upon the shaft W by means of the crank C, as will be clearly understood.

Lying loosely and removably upon the floor *f* of the car F is a number of sills, each consisting of a section P and a section P', pivotally connected, as at *p'*, the section P' having a U-shaped socket *p''* at its outer extremity, and P'' is a third section, one end of which fits loosely in the socket *p''*, as will be understood from Fig. 3. The outermost end of the section P, as well as the outermost end of the section P'', is rounded on its upper side and shouldered on its lower side, as at E, and the lower side of the casing or boxing B is provided with several notches N, each of which is adapted to receive one end of the removable sill where shouldered at E, while the body of this sill rests loosely upon the flooring *f*.

In use the boxes B having been inserted in the ordinary freight-car and secured in place in a suitable manner the sills (preferably four in number, more or less) are laid upon the flooring with their shouldered ends engaging with the notches N, after which the series of slats S are drawn outward, as seen at the left of Figs. 1 and 2, their lower faces resting upon and their straps moving between the sills. These series of slats meet at about the center of the car, and hence there is afforded between the removable sills and between the

slats S' a free circulation of air upward and around through whatever perishable fruit may be supported by this removable car-floor. In addition the side doors of the cars may be slatted or otherwise provided with openings for the purpose of ventilation, this idea forming no part of the present invention.

What is claimed is—

1. In a freight-car, the combination with the car-body; of a box located within and at each endmost lower corner thereof, a shaft having axial trunnions journaled in the ends of the box proper, the trunnion at one extremity being provided with an angular socket, a plurality of straps connected with the shaft, a series of transverse slats carried by the straps, a removably-slatted flooring resting on the car-floor and having shouldered extremities engaging said boxes, and means for operating the shaft, substantially as and for the purpose set forth.

2. In a freight-car, the combination with the car-body, a boxing at each endmost lower corner thereof, and removable sills whose bodies rest upon the car-floor and whose ends have shoulders resting on the lower sides of said boxes; of a windlass in each box, and a slatted floor carried by each windlass, as and for the purpose set forth.

3. In a freight-car, the combination with the car-body and flooring, a box in each endmost lower corner thereof having notches in its lower side, and a series of removable sills whose extremities engage said notches and whose bodies comprise members pivoted together so as to allow them to be folded when removed, of a windlass in each box, a flexible flooring carried by each windlass and comprising longitudinal straps and transverse slats the former moving between the sills, and means for turning the windlass, as and for the purpose set forth.

4. In a freight-car, the combination with the car-body having a flooring, a boxing secured in the lower corner thereof and having notches in its lower side, and a series of sills supported removably by such flooring and having shouldered extremities detachably engaging said notches; of a windlass in the box, a flexible slatted flooring carried by the windlass, and means for turning the windlass, as and for the purpose set forth.

5. In a freight-car, the combination with a car-body having a flooring, and a transverse strip in each lowermost end corner thereof provided with notches; of a series of sills resting removably upon such flooring, each comprising two members pivotally connected at their meeting ends, one member being shouldered at its outer extremity and the other member having a socket at its outer extremity, and a third member whose inner end removably engages said socket and whose outer end is shouldered, said shouldered ends removably fitting the notches in the strips, as and for the purpose set forth.

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

HENRY F. STANLEY.

Witnesses:
ROBT. H. MALONE,
WM. WILSON.