Dec. 4, 1923. 1,476,397

E. A. DOWNEY ET AL

CONNECTOR FOR VENTILATING RACKS OR TRAYS

Filed April 28, 1923

Fig. 1.

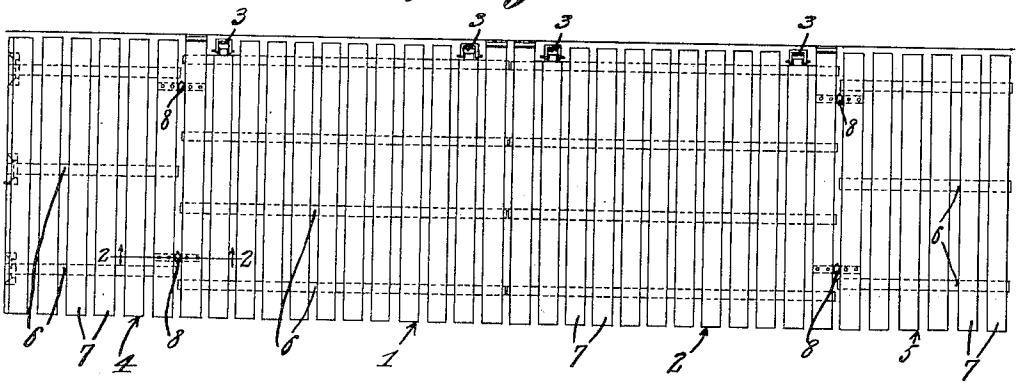


Fig. 2.

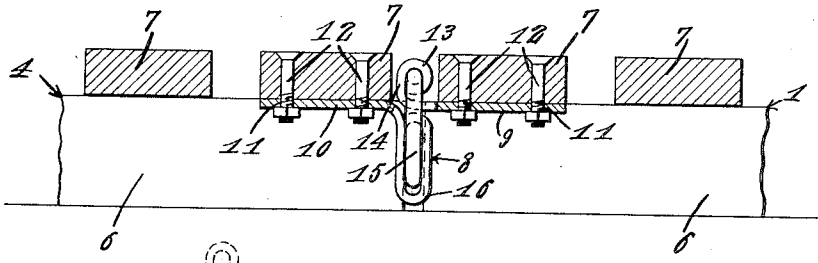


Fig. 3

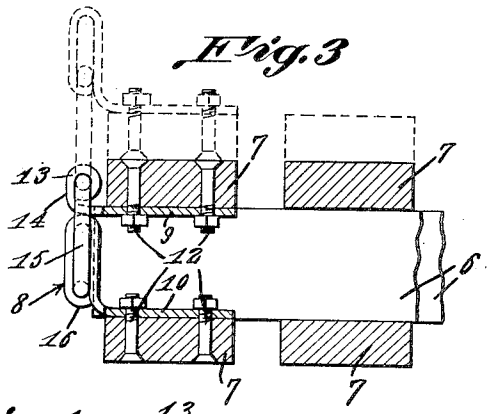
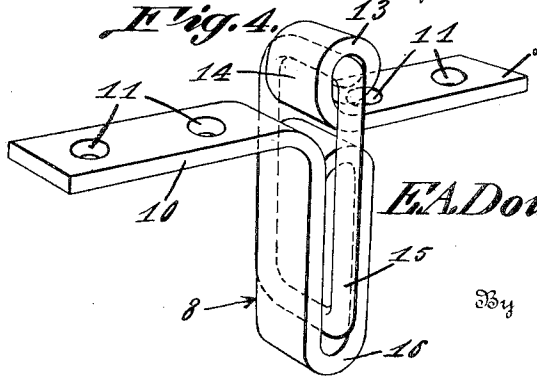


Fig. 4.



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UNITED STATES PATENT OFFICE.

EDWARD A. DOWNEY, OF DEL RAY, AND DAVID McEWAN, OF ALEXANDRIA, VIRGINIA.

CONNECTOR FOR VENTILATING RACKS OR TRAYS.

Application filed April 28, 1923. Serial No. 635,310.

To all whom it may concern:

Be it known that we, EDWARD A. DOWNEY and DAVID McEWAN, citizens of the United States, residing respectively at Del Ray, in the county of Arlington and State of Virginia, and Alexandria, State of Virginia, have invented a new and useful Connector for Ventilating Racks or Trays, of which the following is a specification.

This invention relates to an attachment for railway cars and more particularly to a connector for hingedly connecting the several panels of slatted racks used above the floor of a freight car. The device being used particularly in the shipment of fruits, vegetables and other perishable goods, to permit ventilation at the bottom of the material being shipped.

The object of the invention is to provide a connection which will permit folding, face to face or back to back, of the members to which it is attached.

Another object of the invention is the construction of a simple device of few parts and of such construction as to have maximum strength at a minimum cost of manufacture.

Other objects will appear as the description proceeds.

The preferred embodiment of the invention being shown, it will however be understood that slight changes may be made in the device within the scope of what is claimed, without departing from the spirit of the invention or sacrificing any of the advantages thereof.

In the drawing:

Figure 1 is a diagrammatic plan view of one section of a ventilating rack.

Figure 2 is a longitudinal sectional view through a portion of the rack, the section being taken on line 2—2 of Figure 1.

Figure 3 is a view similar to Figure 2, the hinged sections of the panel being shown in full lines, back to back and in dotted lines folded face to face; and

Figure 4 is a detail perspective view of the connector.

Referring to Figure 1 of the drawing there is illustrated a section of panels, there being four sections like the one shown attached to each car. Each section comprises intermediate panels 1 and 2, which are hingedly connected to the side of the car as shown at 3, permitting the said panels to be moved to a vertical position along the side of the car.

End panels 4 and 5 are hinged to the panels 1 and 2 respectively. Each panel consists of longitudinal members 6 and cross slats 7, the members 6 of one panel being staggered with relation to the members 6 of the next panel.

It is necessary at times to fold the end panels on the intermediate panels in face to face position. At other times it is desirable to fold the panels back to back. To permit folding in either position connectors 8 are provided. Each connector comprises oppositely disposed attaching shanks 9 and 10, provided with bolt openings 11. Counter-sunk headed bolts 12 are used to secure the hinge members to the end slats 7 of adjacent panels. An eye 13 is formed on the upturned end 14 of the shank 9. The eye 13 carries one end of a link 15, the other end of which is slidable in a loop 16, depending from the shank 10 and below the eye 13.

It will be observed from an inspection of Figure 2 of the drawing that the entire connector is located between the upper and lower surfaces of the panels, so that no part of the connector projects above the panel to damage goods shipped without being crated, such as watermelons. It will also be seen by reference to Figure 3 that the connected panels may be folded in either position as heretofore described, the device providing a connection the attaching ends of which are in longitudinal alignment and the pivotal connection between the same being formed without the use of bolts, nuts or rivets, thus producing a strong connection, which may be easily and cheaply manufactured.

Having thus described the invention, what is claimed is:—

1. A device of the class described comprising a pair of panels adapted to be disposed in horizontal alinement, rigid hinge elements secured to the panels, a rigid connecting member, and means for pivotally uniting the connecting member with each of the hinge elements, one of the last specified means being so constructed as to permit the panels to be folded together back to back or face to face, all portions of the hinge elements and the connecting member being housed between the panels and being located entirely below the upper surface of the

panels when the panels are in alinement and in the same horizontal plane.

2. A hinge comprising members, one of which is provided at its inner end with an eye, the other of which is provided at its inner end with an elongated loop, the loop and the eye projecting in opposite directions when the hinge is open and a link one end of which is pivoted in the eye, the other end of which is pivoted in the loop and is slidable therein longitudinal of the loop.

In testimony that we claim the foregoing as our own, we have hereto affixed our signatures.

EDWARD A. DOWNEY.
DAVID McEWAN.