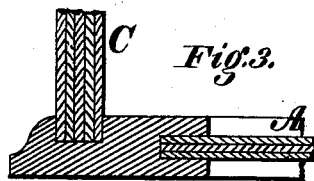
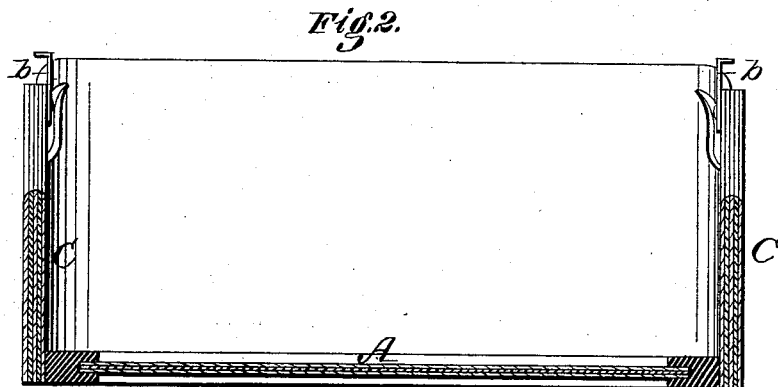
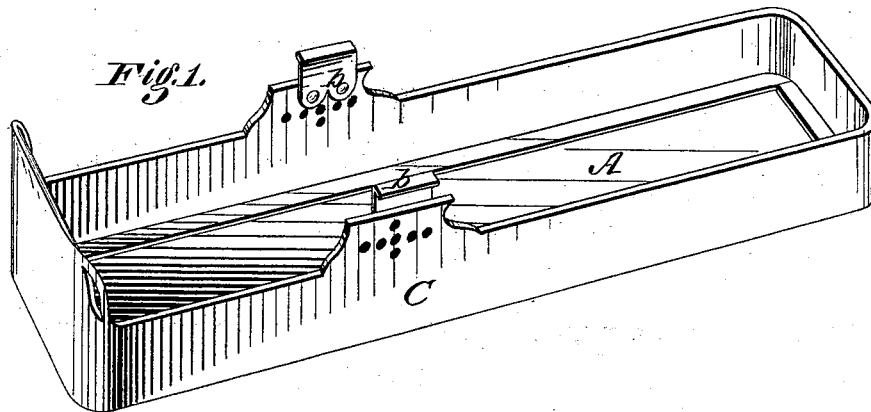


J. M. PERKINS.  
Wagon-Body.

No. 221,097.

Patented Oct. 28, 1879.



*Witnesses:*  
Will R. Dodge.  
Dorcas P. Twitchell.

*Inventor:*  
John M. Perkins  
By his attys.  
Dodgers & Co.

# UNITED STATES PATENT OFFICE.

JOHN M. PERKINS, OF RACINE, WISCONSIN.

## IMPROVEMENT IN WAGON-BODIES.

Specification forming part of Letters Patent No. **221,097**, dated October 28, 1879; application filed November 13, 1877.

*To all whom it may concern:*

Be it known that I, JOHN M. PERKINS, of Racine, in the county of Racine and State of Wisconsin, have invented certain Improvements in Carriage and Wagon Bodies, of which the following is a specification.

The object of my invention is to produce a body for buggies, road-wagons, and other vehicles which will combine the qualities of extreme lightness and strength with those of cheapness and neatness of appearance; and to this end the invention consists in building the body up in one solid continuous whole of layers of wood veneer cemented together, with or without the introduction of fibrous or textile material or sheet metal between the veneers, in the particular manner hereinafter described.

Figure 1 represents a perspective view of a body constructed on my plan; Fig. 2, a vertical cross-section of the same; Fig. 3, a vertical cross-section, showing a modified construction.

In constructing the body shown in the drawings, I first construct the bottom A of a series of veneers laid upon each other, with their grain running in different directions and firmly united by any suitable water-proof cement. Around the edge of this bottom I construct a wooden frame having its inner edge grooved to admit the edge of the bottom and its corners firmly united. Around the outer edge of the frame I build up and secure an upright ledge or wall of veneer, C, made in one continuous unbroken piece, and forming both sides and ends of the box.

The upright wall is formed of a suitable number of thicknesses of veneer, having their grain diversified or arranged in different directions, cemented firmly together in such manner as to form one solid compact mass.

The successive layers of veneer are arranged to break joints at the ends of the sheets or pieces, and at the upper edge they are preferably rounded, to give a finish and avoid the angular edges which would render the layers more liable to a separation in the event of the body receiving rough usage.

The lower edges of the walls are preferably cemented to the frame; but screws, nails, or

other fastening devices may be used in addition to or in place of the cement.

When desired, the frame may be extended outward under the vertical walls, and grooved to receive the edges of the same, as in Fig. 3.

In order to give the body additional stiffness and elasticity, sheets of paper, canvas, or other textile or fibrous material may be introduced between the layers of veneer; or, when an unusual amount of strength is required, one or more sheets of thin metal—such as iron, brass, steel, or zinc—may be used between the sheets of veneer.

As a safeguard against the loosening of the laminae of the body from each other, small rivets may be passed through the body at the points subject to the greatest strain; but this is not ordinarily required.

At suitable points on the sides of the body the walls are extended upward and fashioned into risers *a*, to sustain the ends of a seat. The risers may be provided with any suitable seat fastening devices; but a cheap and simple plan is to secure to the risers metal plates *b*, having their upper ends bent outward, as shown in the drawings.

By a moderate pressure the risers may be sprung inward sufficiently to admit of the plates being sprung into the inside of the seat-frame or fastenings thereon, and then, when the pressure is removed, the risers will spring outward again and cause the plates to engage with the seat.

At the forward end of the body the wall is extended upward and fashioned into a dash-board, the dash thus formed being cheap, neat, and free from liability to be displaced. The construction of the dash in one piece with the body avoids the use of the usual metal supports, and permits a considerable reduction in the expense of manufacturing a body.

Openings may be made in the ends of the dash and handles, formed as shown.

Of course the form and size of the body may be varied, as circumstances require, the frame being changed to correspond, without departing from the limits of my invention, which consists in building up the continuous seamless walls of a vehicle-body in substantially the manner shown.

I am aware that layers of veneer have been cemented together, with a diversified grain, and that the material thus formed has been used in the construction of chair-seats, boxes, and various other articles, and also that its use has been suggested in the construction of cars, stages, and other vehicles, the material being applied, in the place of the ordinary boards or panels, to a supporting-frame to which the material was nailed, the construction being the same as that ordinarily employed, except that the scale-board or veneer-board was applied in the place of the ordinary flat boards or panels, there being no suggestion or intimation that the frame-work was to be dispensed with, that the body was to be built in one piece, or that the sides and ends would be formed in one continuous piece passing around and forming the angles or corners.

I do not claim, broadly, as my invention the use of veneer-board in the construction of wagon-bodies or other objects; but

What I do claim is—

1. The body consisting of the grooved base-

frame having the laminated bottom A inserted therein and the continuous laminated wall built up in one piece around its outer edge, as described and shown.

2. A carriage or wagon body having its corners built up in one continuous unbroken seamless piece of several layers of veneer cemented together, substantially as described and shown.

3. A wagon-body having its corners built up in one piece with the sides and ends of several layers of veneer cemented together, substantially as described and shown.

4. A wagon-body and dash-board built together in one continuous seamless piece of layers of veneer cemented together and pressed into form, substantially as described and shown.

5. A veneer wagon-body having standards or uprights built thereon, forming an integral part thereof, as shown and described.

JOHN M. PERKINS.

Witnesses:

SIMEON WHITELEY,  
JOHN W. KNIGHT.