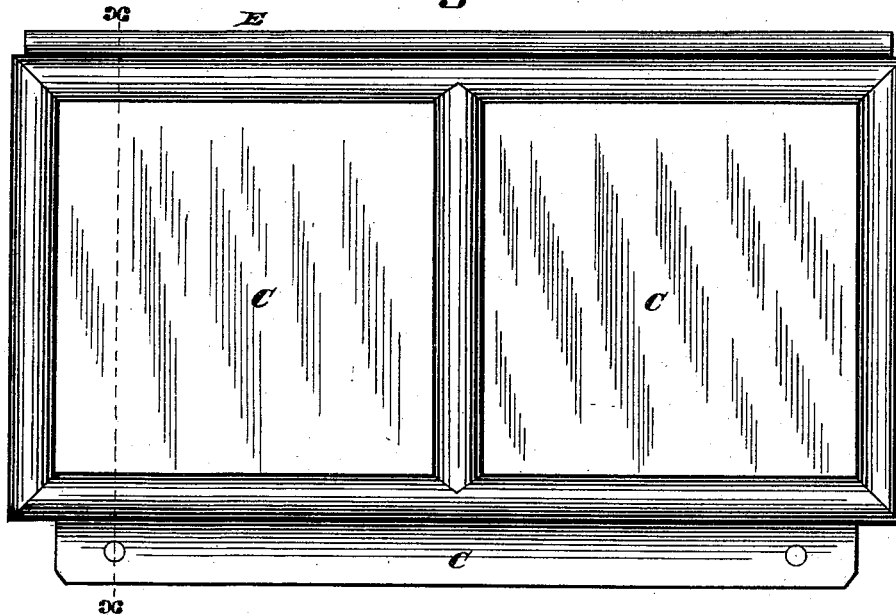


B. J. WARDEN.  
Dashboard for Vehicles.

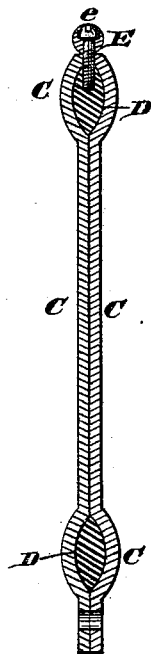
No. 216,002.

Patented May 27, 1879.

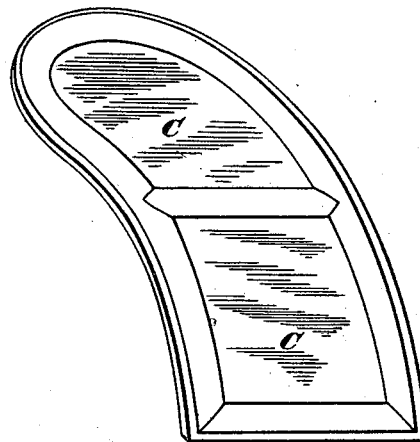
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



*Attest*  
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# UNITED STATES PATENT OFFICE.

BENJAMIN J. WARDEN, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN DASH-BOARDS FOR VEHICLES.

Specification forming part of Letters Patent No. **216,002**, dated May 27, 1879; application filed April 14, 1879.

*To all whom it may concern:*

Be it known that I, BENJAMIN J. WARDEN, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Carriage-Dashes and Wheel-Fenders, of which the following is a specification.

My invention relates to dashes and wheel-fenders for vehicles.

It consists of an ordinary dash-frame, around which is pasted or cemented a covering of papier-maché, or any strong paper, the outer surfaces of which are finished by japanning or glossing by any of the usual processes.

The object of my invention is to furnish a durable and cheap article, and one which can have the entire outer surfaces of a uniform finish, thereby improving the wear and appearance of the dashes and fenders, giving them the appearance of leather, and at the same time increasing the durability.

Other features of my invention will be described in the following specification, in which—

Figure 1 is a front elevation of my improved carriage-dash. Fig. 2 is a section on line *x x*, Fig. 1; and Fig. 3 represents my improved wheel-fender.

D represents an ordinary metal dash-frame. C C represent sheets of papier-maché, which are united together and around the dash-frame by glue or cement, as shown in Fig. 2, and form the paper paneling or covering of the dash or fender.

E represents the rail, which is fastened to the top of the frame outside of the covering by means of screws or rivets *e e*.

The preferred way of attaching the dash to the bed of the vehicle is by means of the clamp-brackets described in a pending application; but any other appropriate means may be employed.

The mode of uniting the covering to the frame is preferably as follows: Two dies, each the counterpart of the other, are made with grooves fitting the frame, but with the faces of the dies sufficiently apart to compress between them the covering, so as to firmly unite the paper under pressure around the frame. Strong thick sheets of paper, each of a larger

dimension than the frame, are placed around the frame, the paper being first suitably prepared by dampening or steaming, so as to render it soft and pliable for shaping, after which the inner surfaces are coated with glue or cement, water-proof cement being much the preferable. The dash thus covered is introduced between the dies and subjected to a sufficient amount of pressure to firmly unite the inner surfaces of the paper to each other and to the frame. After the parts have been shaped by suitable compression by the dies, the dash is removed therefrom and dried in an oven or kiln. After the dash has been suitably dried and the cement has become set, the edges are trimmed off and the rail E is then fastened to the top, and then the dash is japanned in the usual manner.

Instead of using papier-maché or sheets of paper united as above described, the pulp of paper suitably mixed with glue in solution may be applied to the frame by means of heated rollers or dies in the manner usually employed in making articles from paper-pulp.

Before the japan is applied, the outer surfaces of the dash may be rubbed down so as to be perfectly smooth, and the frame being covered with the same material as the panels, the entire surface can be made to receive the highest possible finish of gloss.

By reason of the hardness of the paper, the durability of the paneling exceeds that of the best leather, being less liable to crack from the effects of heat or cold, and less liable to damage from abrasion.

The japan should be carefully applied so as to render the covering of the dash water-proof. There are several well-known methods of accomplishing these results. The dash may be dipped in sizing and then varnished or painted; but I prefer the process of japanning.

The wheel-fender, it is obvious, can be made by the same process as that described for the dash and finished in the same manner.

What I claim as my invention is—

1. A carriage dash or fender constructed of an ordinary metallic frame covered with papier-maché or its described equivalent, substantially as described.

2. A carriage dash or fender constructed of

an ordinary metallic frame covered with papier-maché or its described equivalent, and finished with japan or other water-proof polish, substantially as described.

3. The combination, with a carriage-dash composed of an ordinary metallic frame, entirely covered with a material pressed or molded into place to form an unstitched dash, of a rail attached closely to the upper edge of the covering of the dash-frame by screws or

rivets passing through the rail into the top bar of the metallic frame for protecting the covering around said top bar, substantially as shown and described.

In testimony whereof I have hereunto set my hand this 4th day of April, 1879.

B. J. WARDEN.

Witnesses:

EDWARD BOYD,

JOHN E. JONES.