(No Model.)

G. LOWA.

CARRIAGE DOOR.

No. 275,398. Patented Apr. 10, 1883.

Fig. 1.

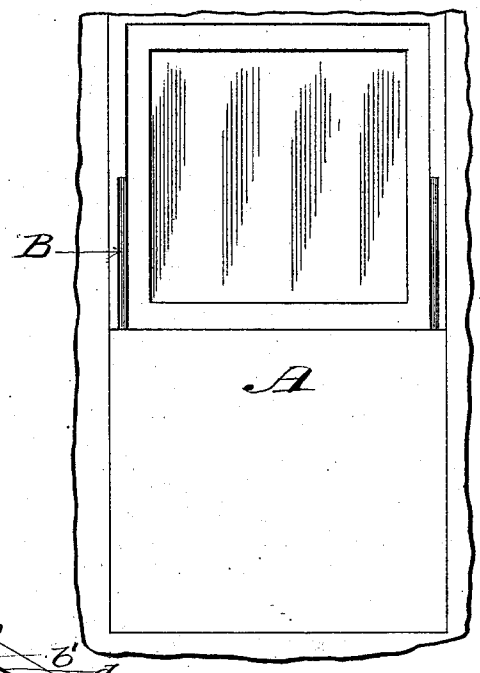


Fig. 2.

Fig. 3.

Fig. 4.

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GUSTAVUS LOWA, OF ST. LOUIS, MISSOURI.

CARRIAGE-DOOR.

SPECIFICATION forming part of Letters Patent No. 275,398, dated April 10, 1883.

Application filed December 7, 1882. (No model.)

To all whom it may concern:

Be it known that I, GUSTAVUS LOWA, of St. Louis, Missouri, have made a new and useful Improvement in Carriage-Door Flippers, of which the following is a full, clear, and exact description, reference being had to the annexed drawings, making part of this specification, in which—

Figure 1 is a side elevation, showing that portion of the carriage with which the improvement in question is immediately connected; Fig. 2, a view in perspective upon an enlarged scale, showing that portion of the carriage-door with which the improvement is especially connected, the flippers being raised; Fig. 3, a similar view, the flippers being turned down; and Fig. 4, a view in perspective, showing one of the flippers attached to its irons.

The same letters of reference denote the same parts.

The present invention relates especially to the peculiar mode of attaching the flippers to the carriage-door.

A, Figs. 1, 2, 3, represents a door of a carriage.

B B represent the flippers.

Saving the present improvement, the door and flippers are of the usual construction. As hitherto made, it has been customary in attaching the flippers to hinge them to narrow plates, the outer one of which plates is inserted immediately in the outer surface of the carriage-door, and the inner one of the plates being similarly applied to the inner part of the door, or that portion of the door which is used, in connection with the outer portion of the door, to form the receptacle for the sash. As thus made, the irons are not only liable to fracture; but owing to the fact that the outer iron is let into the surface of the door, so as to come flush with the surface of the door, when the iron is broken and requires to be renewed or repaired it involves the necessity of repainting and refinishing the outer surface of the door. Such an operation is, from the nature of the finish given to the carriage-door, quite expensive. To obviate this difficulty and to supply a stronger hinge for the flipper is the aim of the present invention.

In place of hinging the flipper to a plate or iron in the outer surface of the door, it is at its outer corner, *b*, hinged to an iron of the shape shown at C, Figs. 2, 4. The iron C is inserted in a mortise in the part A^2 of the door A, so as not to be visible in side elevation, and the flipper is then journaled to the iron C, as shown in Figs. 2, 3, 4. The flipper, on its inner side or corner, *b'*, is hinged to an iron, D, Figs. 2, 4. This iron extends vertically, and is mortised into the outer surface, *a*, of the inner portion, A', of the door, substantially as shown in Fig. 2. As thus connected, nothing is visible of the flipper-hinge from the outer side of the carriage saving the pintle of the hinge, and whenever a flipper requires to be renewed it is only necessary to disconnect the flipper from the irons C D, the finish of the carriage-door not in any way being interfered with by the operation. The need of renewing the flippers, however, is less than heretofore, for the irons as made in the present construction are much stronger than those previously employed, and from the manner of inserting them in the carriage-door there is less liability of their being injured by the strains incident to the use of carriage-door flippers, for it will be observed that the ears *b b* upon the flipper in the present construction come entirely upon the outer sides, *c d*, respectively, of the irons C D.

In the original construction above referred to, the flipper, at its outer lower corner, is provided with an ear, which comes within an ear upon the iron corresponding to the iron C, and as thus made any outward strain upon the flipper tended to break the ear upon the iron. In the present case the strain is sustained by the pintle of the hinge, and there is no strain in practice brought upon either of the irons C D calculated to fracture them or to injure the outer surface of the door. The spring E on the inside of the flipper B, pressing against the glass when raised, will prevent its rattling.

I claim—

In a carriage-door, the flippers B B, each of which is hinged at both of its corners *b b'* to the door by means of irons C D, said iron C being mortised into the outer portion, A^2, of the door, and the iron D being mortised into the inner portion, A', of the door, substantially as described.

GUSTAVUS LOWA.

Witnesses:
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