

G. W. Beers.

Coach Hinge.

N^o 112,313.

Patented Mar. 7, 1871

Fig. 1.

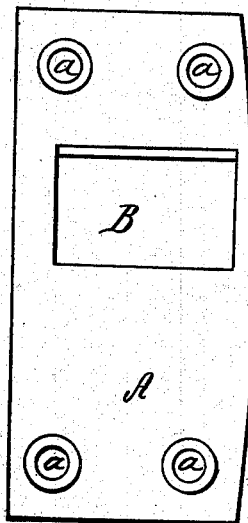


Fig. 2.

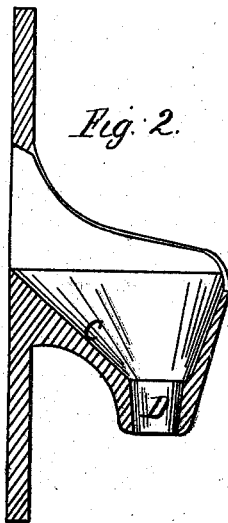


Fig. 3.

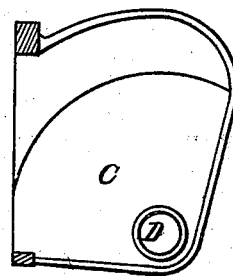


Fig. 5.

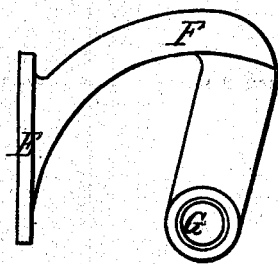
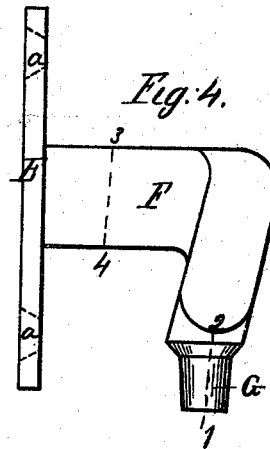


Fig. 4.



Witnesses;
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United States Patent Office.

GEORGE W. BEERS, OF BRIDGEPORT, CONNECTICUT.

Letters Patent No. 112,313, dated March 7, 1871.

IMPROVEMENT IN HINGES FOR CARRIAGE-DOORS.

The Schedule referred to in these Letters Patent and making part of the same.

I, GEORGE W. BEERS, of Bridgeport, county of Fairfield, State of Connecticut, have invented certain new and useful Improvements in Concealed Self-guiding Carriage-door Hinges, of which the following is a specification.

My invention consists in the combination of a socket with orifice at lower portion and a lever-arm carried downward at an angle corresponding to the depression of the socket, so as to admit of a small opening in the face-plate.

Description of Accompanying Drawing.

- Figure 1 is front view of hinge-back.
- Figure 2 is section view of hinge-back.
- Figure 3 is top view of hinge-back.
- Figure 4 is side view of front.
- Figure 5 is top view of front.

General Description.

- A, fig. 1, is the plate of hinge.
- B, opening for arm of front.
- c, guiding-plane.
- D, pivot-chamber.
- a a a a, holes for screws.
- E, fig. 5, plate of front.
- F, arm of front.
- G, pivot.

I construct my hinge as follows:

To the plate A, fig. 2, the guiding-plane or cup c is cast, with the pivot-chamber D bored at the juncture of the line of guiding-plane c.

I also cast the opening B, through which the arm F, fig. 5, works; the holes a a a a also cast in the plates for the purpose of securing the back to door-jamb.

I also curve the side of plate A to correspond with curve of jamb.

The front or working part of hinge E has the arm F cast onto its face. This arm runs at right angles with face of front on two sides.

This section of the arm fits the opening B, fig. 1, and keeps the hinge in position perpendicularly.

To allow for the throw of hinge, the front section of arm is carried to the side of plate, giving it a segment form laterally.

The arm is then extended down from the front section at any desired angle, and terminates with the pivot G.

This section of the arm is decreased in width in the perpendicular direction, and increased in thickness the opposite direction, so that the distance through the pivot from the point 1 to 2 shall be equal to that of the first section of arm at 3 4.

The pivot G is nicely fitted to the chamber D.

I also bevel the upper side of opening B, to secure ease in entering the arm, and to lessen the height of opening.

The manner of using is readily understood. The back of hinge is fitted to the door-jamb of carriage and secured in position, the hinges being set as near the ends of door as deemed best. The front of hinge is then secured to the door by screws.

When it is desired to put the door in place, the ends of arm are set into the opening and the hinge slides to its place, without further care, by the action of guiding-plane or cup c.

The advantages of my invention are—

First, the opening B is made smaller and regular in form, consequently adding to its beauty as well as strength.

Second, the ease with which the door is put in place. The guiding-plane or cup c carries the pivot directly to its position, whereas in most of the old hinges the arm is carried out at right angles, and the end secured with pin, after consuming considerable time in adjusting the same.

I claim as my invention—

The combination of the socket C with orifice D and arm F, the lever part of the latter curved downward at an angle to correspond with the depression of the socket, and furnished with a pintle, G, all arranged as described.

In testimony whereof I have signed my name to this specification before two subscribing witnesses.

GEO. W. BEERS.

Witnesses:

G. SKAATS,
A. SKAATS.