

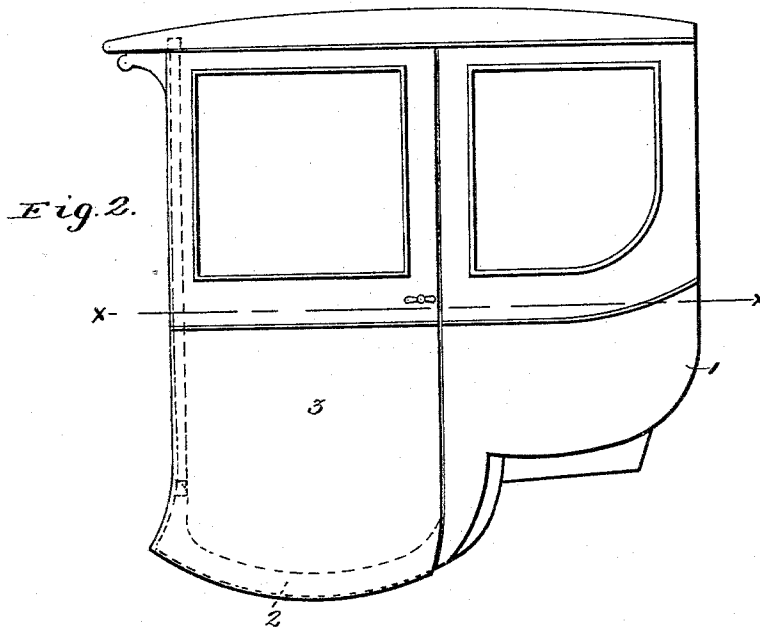
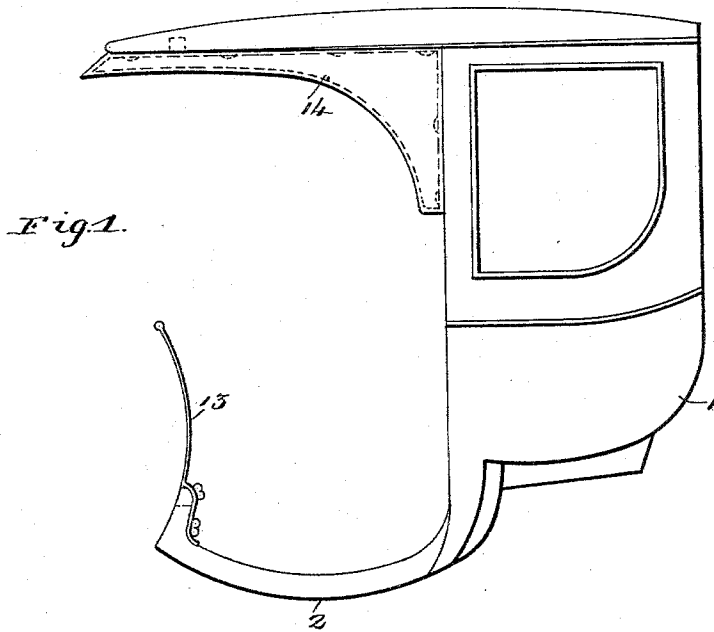
(No Model.)

2 Sheets—Sheet 1.

G. H. HOLTZMANN.
CARRIAGE BODY.

No. 583,998.

Patented June 8, 1897.



Witnesses
Alfred A. Mathew
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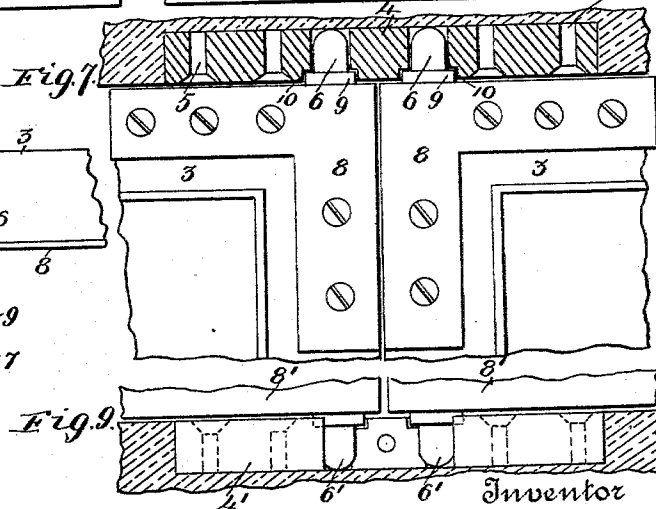
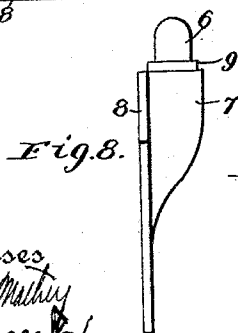
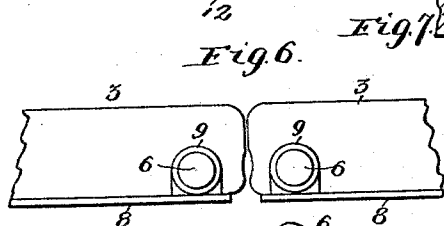
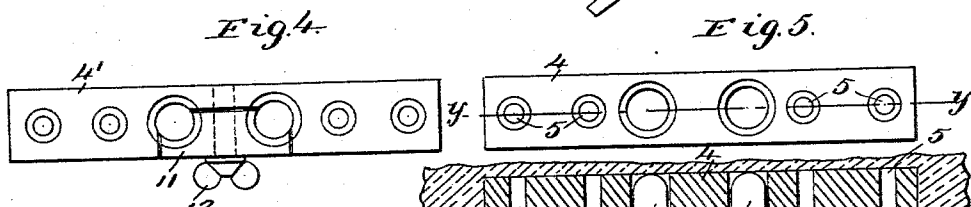
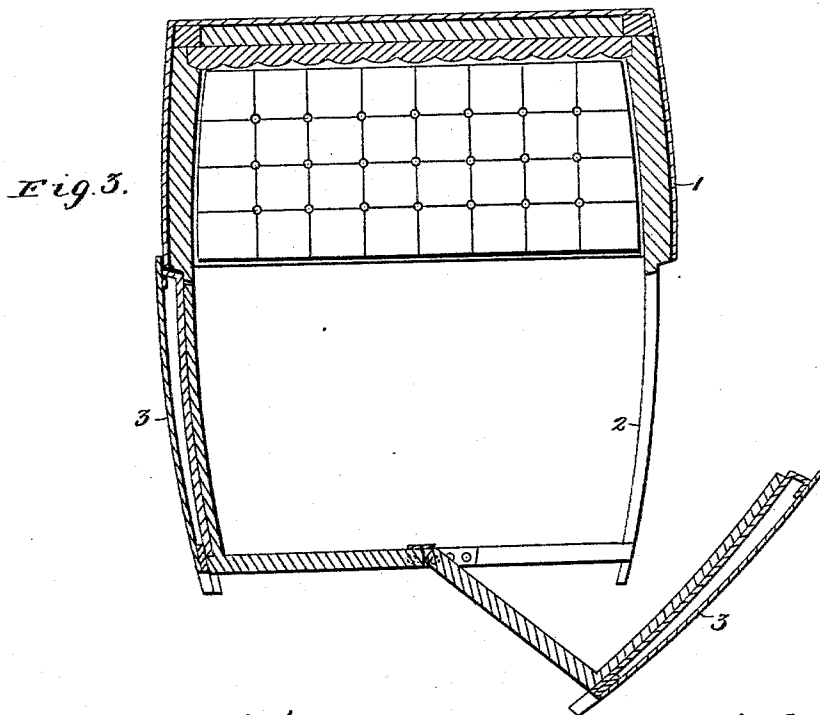
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UNITED STATES PATENT OFFICE.

GEORGE H. HOLTZMANN, OF ST. LOUIS, MISSOURI.

CARRIAGE-BODY.

SPECIFICATION forming part of Letters Patent No. 583,998, dated June 8, 1897.

Application filed October 28, 1896. Serial No. 610,310. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. HOLTZMANN, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Carriage-Bodies, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in carriage-bodies; and it consists in the novel arrangement and combination of parts more fully set forth in the specification, and pointed out in the claims.

In the drawings, Figure 1 is a side elevation of a storm-buggy body. Fig. 2 is a similar view of a closed carriage. Fig. 3 is a section on $x x$ of Fig. 2, the door being swung open. Fig. 4 is a top plan view of the plate serving as a bearing for the lower pivotal ends of the swinging doors. Fig. 5 is a similar view of the plate serving as a support for the upper pivotal ends of the doors. Fig. 6 is an end view of the adjacently-located swinging doors. Fig. 7 is a section on $y y$ of Fig. 5, showing the manner of pivoting the doors to the upper plate. Fig. 8 is an end view of the plate secured to the door, on which the pivotal dowel is formed; and Fig. 9 is a section similar to Fig. 7, showing the manner of pivoting the lower dowels of the doors, but showing the plate supporting the dowels in side elevation.

The object of my invention is to construct a carriage-body which can readily be converted from a closed to an open carriage, or vice versa, according to the nature of the weather during which the same is to be used.

A further object is to provide the body when closed with doors hinged in such a relation that a maximum amount of space will be presented for access into or egress from the carriage when such doors are opened.

The invention presents advantages which will be apparent from a detailed description of the same, which is as follows:

Referring to the drawings, 1 represents the carriage-body, having substantially parallel front and rear walls, and 2 the "rocker" or bottom frame thereof. In the prevailing forms of closed carriages the doors, as is well known, are hinged to the side thereof intermediate of the ends of the body. In the pres-

ent invention the doors 3 are pivoted along the front of the body intermediate between the sides thereof, the door being angular and the angle of the door corresponding when the latter is closed to the front corner of the carriage-body, in which case the front panel of the door corresponds to one-half of the front wall of the closed carriage thus formed, and the lateral or side panel corresponds to the forward portion of the side wall of the said carriage. A door so constructed and hinged will, when swung open, always clear the wheel and at the same time form an opening or entrance to the interior of the carriage, which is of maximum dimensions. An inspection of Fig. 3, which shows one of the doors swung open, at once discloses the maximum room or space which this construction offers for access into or egress from the carriage—a most desirable feature for large persons. Inasmuch as the pivotal points or hinge-line of each door is located along what corresponds to the front wall of the carriage-body, it is obvious that to whatever degree the door may be swung it will clear the wheels on which such body may be mounted, as the radius of the circle described by the free edge of the side panel of the door never extends beyond the ends of the axles by which the wheels are carried. The body when provided with doors, as illustrated in Fig. 3, constitutes a closed or physician's carriage which can readily be converted into an open or "storm" buggy by the simple removal of the doors and the substitution therefor of a suitable dashboard secured to the front of the rocker or bottom frame. To effect this conversion, I shall first describe the construction employed for the mounting of the doors.

Secured along the inner surface of the top wall or roof of the carriage and adjacent to the front edge thereof and made flush with said surface is a metallic plate 4, provided with a series of openings 5 for the reception of screws by which it is secured to said roof. The medial portion of said plate is provided with openings for the reception of the dowels 6, which form the terminals of the enlarged ridges 7, cast or formed integral with the right-angular plates 8, secured along the outside of the front panels of the doors, the ridges 7 being sunk into the body of the panel, as

best shown in Fig. 6. The dowels are each provided with a basal collar 9, which bears against a shoulder 10, formed at the outer end of the opening of the plate by which the dowel 5 is received, the dowel 6 forming the upper pivot for the door. The adjacent ends of the front panels to which the plates 8 are secured are suitably rounded or cut away, so as to permit the edge of the vertical member of the right-angled plate to readily sweep or pass by the edge of the adjacent door when the door to which the plate is secured is swung open. (See Fig. 6.) Along the front edge of the rocker and immediately under the plate 4 is secured a similar plate 4', similarly secured and similarly provided with openings for the reception of the lower dowels 6', carried by the lower plates 8', secured to the outside of the lower ends of the front panels. The openings, however, which receive the dowels 6' are semicircular in cross-section, the plate 4' being cut away opposite said openings, so that the dowels 6' may be inserted into their bearings from the side of the plate, (it being understood, of course, that in hanging the doors the upper dowels are first inserted into the openings of the upper plates 4,) the doors when once in place being firmly secured by a block 11, inserted into the notch thus cut away in the plate 4' and forming the balance of the bearing or supporting surface for the lower ends or pivotal dowels of the doors. A butterfly-screw 12 secures the block 11 in place. It is apparent from the foregoing construction that by simply removing the block 11 the doors can be removed from the body, thus converting what was a closed carriage

into a storm or open buggy, as seen in Fig. 1. When thus converted, a suitable dashboard 13 is temporarily secured along the front edge of the rocker and the side trimmings 14 are secured to the carriage-top.

It is of course within the spirit of my invention to hinge the door at any point along the front wall between the sides of the carriage, but not necessarily at the middle of the said front wall.

Having described my invention, what I claim is—

1. In a carriage-body, a suitable body proper, plates secured along the top and bottom thereof, openings in said plates, suitable doors, plates carried by the doors, each plate having a ridge sunk in the body of the door, a dowel forming a continuation of the ridge, the said dowels forming the pivotal points for said doors, the openings for the reception of the lower dowels being cut away from the side to permit the insertion of the dowels, and a securing-block adapted to be secured to the lower plate and complete the bearing for the lower dowels, substantially as set forth.

2. In a carriage-body, a suitable body, detachable doors forming the front wall and a section of the side wall of said body, whereby upon the removal of the doors the carriage is converted from a closed to an open one, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE H. HOLTZMANN.

Witnesses:

ALFRED A. MATHEY,

EMIL STAREK.