

(No Model.)

W. N. MORRELL.
PHAETON.

No. 473,330.

Patented Apr. 19, 1892.

Fig. 1.

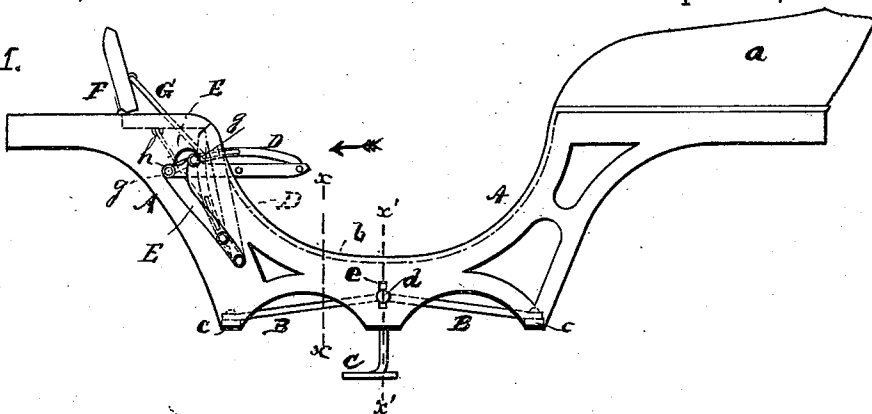


Fig. 2.

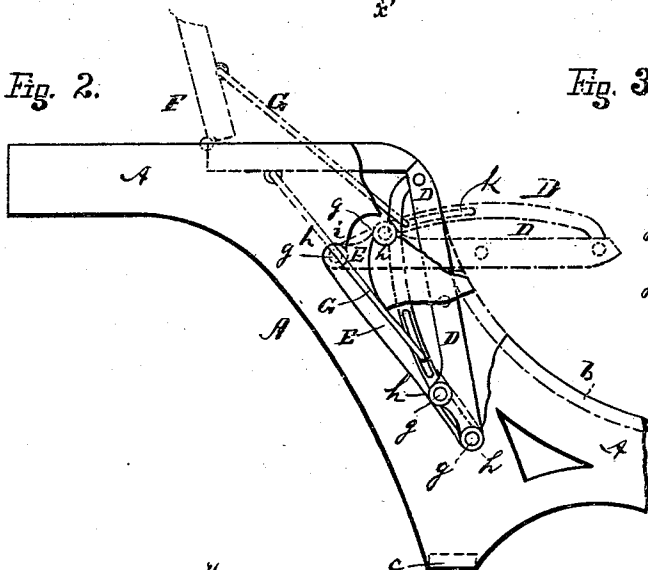


Fig. 3.

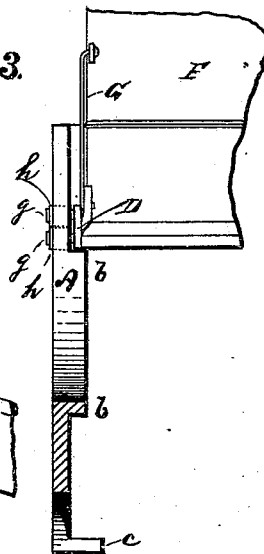


Fig. 4.

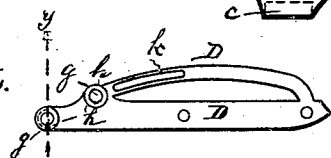


Fig. 5.

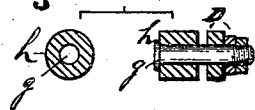
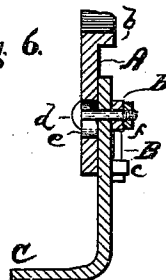


Fig. 6.



WITNESSES:

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PHAETON.

SPECIFICATION forming part of Letters Patent No. 473,330, dated April 19, 1892.

Application filed August 13, 1891. Serial No. 402,516. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. MORRELL, a citizen of the United States, and a resident of Waterloo, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Phaetons, of which the following is a specification.

My invention relates to improvements in that class of vehicles commonly known as "phaetons" or "light-riding carriages or buggies."

My invention consists in the novel construction of the rocker plates or irons, in novel means for applying the folding seat to the said plates, and in the means employed for bracing the said plates, all of which is specifically set forth in my several claims and shown in the accompanying drawings, in which—

Figure 1 is a side view of one of the said plates, and also showing means employed for bracing or trussing the same and for applying the folding seat thereto. Fig. 2 is a like representation enlarged and showing the forward portion of the said plate and its seat attachments. Fig. 3 is a section in the plane of the line *xx* of Fig. 1 viewed in the direction indicated by the arrow there shown. Fig. 4 is a detail, the same being a side view of one of the end bars or irons of the folding seat. Fig. 5 is a detail enlarged, the same being a section in the plane of the line *yy* of Fig. 4; and Fig. 6 is a section in the plane of the line *x'x'* of Fig. 1.

Like letters of reference indicate like parts.

A represents one of the rocker-plates referred to, *a*, however, not being a part of the same, but merely indicating the form of the end of the rear seat-arm. Extending laterally from the upper curvature of this plate is a flange *b*.

c c are comparatively small lugs, and B is a brace-bar or truss-rod applied at its ends to the said lugs and to the central portion of the said plate at a point higher than the said lugs, as indicated in Fig. 1.

C is the step. In practice I apply the step to the said iron by means of a bolt *d*, passing through a slot *e* and through the bar B, *f* being a nut run upon the said bolt, as is clearly indicated in Fig. 6. The step C, however, may be applied in any suitable way. The

function of the bar or rod B is to prevent the plate A from buckling under a heavy load. The flange *b* also aids in that respect and serves as a bearing for the plate upon the wooden portion of the body-frame. This plate I make of metal, preferably steel; but it may be made of malleable iron or other suitable metal combining strength and lightness.

D is an iron or side arm or end piece constituting a part of the forward seat. This iron I make, by preference, in one piece, as indicated in Fig. 4; but it may be made in two pieces, if deemed best, as indicated in Fig. 1. Projecting laterally from the forward part of the iron D are two pins or studs *g g*; but instead of these studs bolts may be used, as indicated in Fig. 5.

h h are small anti-friction rollers upon, and which may be retained upon said studs or bolts in any suitable way.

E is a slot in the plate A, and the upper end of this slot is forked or branching, as is clearly indicated in Figs. 1 and 2. The studs or bolts *g g*, with their anti-friction rollers thereon, project into this slot. If it be understood that the seat is to be supported in a horizontal position for use, as indicated by the full lines in Fig. 1 and by the dotted or broken lines in Fig. 2, these studs will occupy the upper end of the slot E and support the load or weight upon the seat. If it be further understood that two arms D D are connected in the completed seat, it will be perceived that if the rear or free end of the seat be raised the opposite or forward part will descend until the said studs or pins occupy the lower end of the said slot, thus holding the seat in its closed or folded position, as indicated by the dotted lines in Fig. 1 and by the full lines in Fig. 2. In order to return the seat to its horizontal position, it is only necessary to raise and unfold it. The exact form of the slot E here shown is not absolutely essential; but I deem it preferable to present a well-defined shoulder *i*, Fig. 2, for contact with the lower roller when the seat is open and another to support the upper roller at the same time.

F is the back of the front seat, which is hinged at its lower edge to the body. In order that the back F may be raised and lowered simultaneously with the seat, I connect

the back with the seat by means of a rod G, pivotally connected or hinged to each; but in order to compensate for any eccentricity of movement I allow the lower end of the said rod to move in a slot $\frac{1}{2}$ in the arm D.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The phaeton rocker-plates A A, having thereon a laterally-extending flange b and provided with the truss-rods or brace-bars B B, substantially as and for the purposes specified.

2. The phaeton rocker-plates A A, curving downwardly between the seat-supporting portions thereof, in combination with the truss-rods or brace-bars B B, arranged parallel to each other and applied to said plates at points about midway between said seat-supporting parts and also at or near the lower ends or portions of said curvatures, substantially as shown and described, and for the purposes set forth.

3. The phaeton rocker-plates having there- in the branching or forked slots E E, in connection with the movable or folding seat D,

having thereon spindles or trunnions entering the said slots, substantially as and for the purposes specified.

4. The combination, in a phaeton-body, of the folding back F, the folding seat D, and the continuous connecting rods or bars G G, pivotally connected to the said back and seat, one end of the said rods or bars having sliding bearings in slots in the side bars connected thereto, substantially as and for the purposes specified.

5. The combination, in a phaeton, of rocker-plates having forked or branching slots therein, of a folding seat provided with spindles entering said slots and a back for said seat connected thereto by means of a rod or bar pivotally connected to said back and seat, substantially as and for the purposes specified.

Signed at Waterloo, in the county of Seneca and State of New York, this 7th day of August, A. D. 1891.

WILLIAM N. MORRELL.

Witnesses:

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GEORGE E. SHERWOOD.