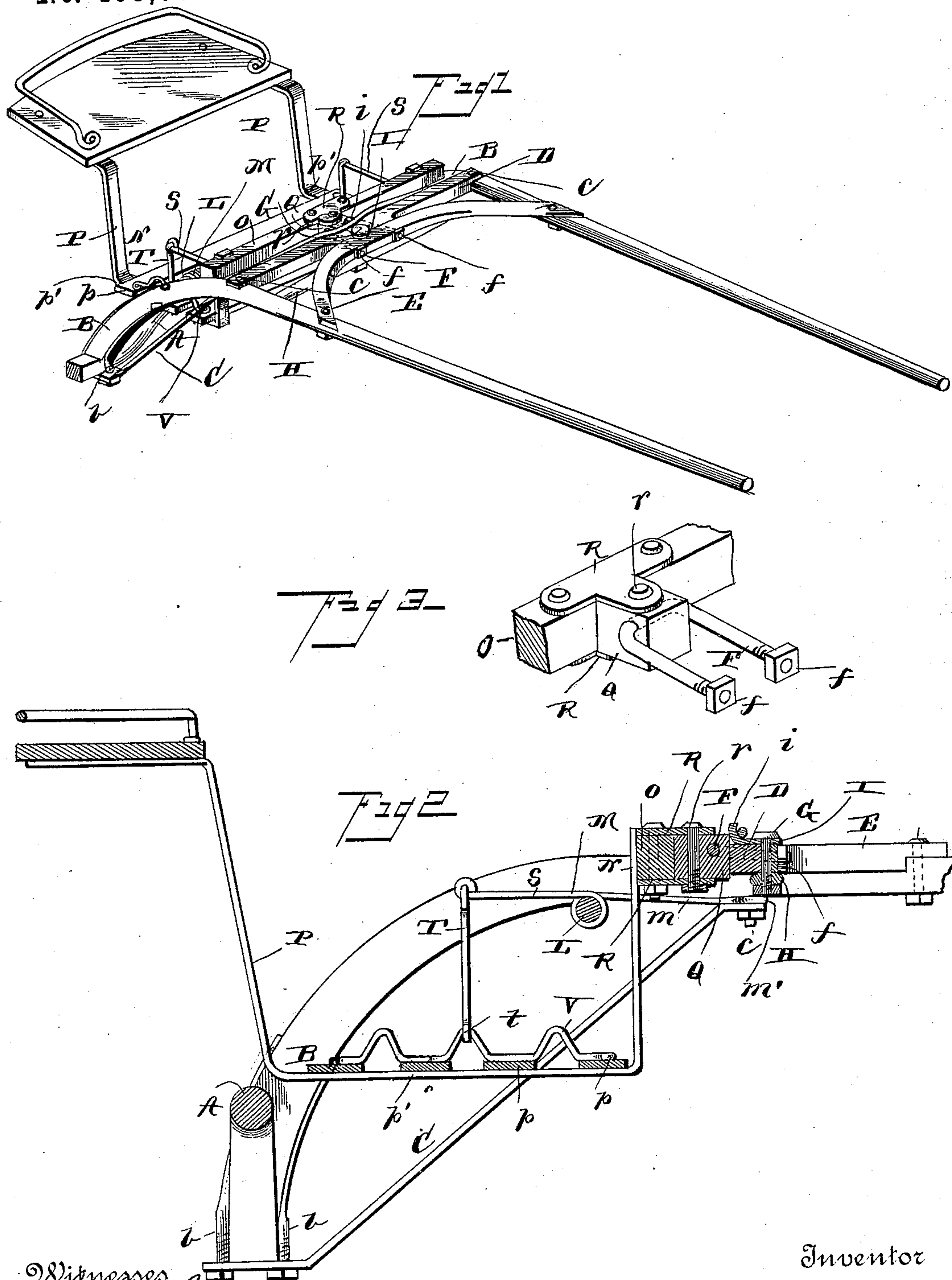


(No Model.)

J. W. COOMBE.
ROAD CART.

No. 405,081.

Patented June 11, 1889.



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UNITED STATES PATENT OFFICE.

JOHN W. COOMBE, OF STURGEON, MISSOURI.

ROAD-CART.

SPECIFICATION forming part of Letters Patent No. 405,081, dated June 11, 1889.

Application filed February 16, 1889. Serial No. 300,111. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. COOMBE, a citizen of the United States, residing at Sturgeon, in the county of Boone and State of Missouri, have invented new and useful Improvements in Road-Carts, of which the following is a specification.

The invention relates to improvements on road-carts; and it consists in a certain novel construction and combination of devices, fully described hereinafter in connection with the drawings, and specifically pointed out in the appended claims.

In the drawings, Figure 1 is a perspective view of a road-cart embodying my improvements. Fig. 2 is a central longitudinal sectional view of the same. Fig. 3 is a detail perspective view of the front connection.

Referring by letter to the drawings, A designates an arched axle, to which near its extremities are attached the rear ends of the thills B B by the clip-bolts *b b*, and C C designate inclined brace-rods which extend from the under side of the axle to an intermediate point of the thills. The front ends of these brace-rods are secured in place by the vertical bolts *c c*, which also attach the ends of the cross-bar D to the upper side of the thills, and a curved brace E is attached at its central point to the center of the said cross-bar, and is attached at its ends to the thills in front of the cross-bar.

A U-shaped bolt F has its arms passed through registering perforations in the adjacent portions of the cross-bar and curved brace, and engaged at their free ends (in front of the said curved brace) by the clamping-nuts *f f*, and a vertical king-bolt G is passed through an aperture in the cross-bar between the arms of the U-shaped bolt and forms the pivot of the whiffletree H, which is arranged under the cross-bar.

A hook-plate I, having a hook *i* on its rear edge, is engaged by the upper end of the king-bolt, and a brace-rod K, which is engaged at its ends in apertures in the thills in rear of the cross-bar, is looped at its center over the said hook, thereby tending to resist the forward strain on the center of the cross-bar, which is caused by the draft of the horse. The combination of this brace-rod and the

curved brace which is arranged in front of the cross-bar prevents all straining and displacement of the latter, and at the same time braces and supports the thills and maintains them in the proper relative position.

L represents a transverse round shaft, which is bolted or otherwise firmly secured at its ends to the under sides of the thills in rear of the cross-bar, and on the extremities of this shaft, adjacent on the inner sides of the thills, are coiled the springs M M, which have their outer ends extended to form the retaining-arms *m m*, these arms being attached rigidly to the thills in front of the shaft. The arms *m m* are preferably provided with eyes *m' m'*, which are engaged by the lower ends of the bolts *c c*, which secure the cross-bar to the thills.

N represents the seat-frame or the body of the vehicle, which consists, essentially, of the front bar O, which is connected to the cross-bar of the thills, the substantially U-shaped side bars or straps P P, which are attached at their front ends to the ends of the front bar and pass under the transverse shaft, and the seat which is to the rear ends of the said side bars or straps. Slats *p p* are attached to the lower portions *p' p'* of the side bars or straps to form a foot-rest for the occupant of the vehicle.

A block Q is swiveled on the rear exposed portion of the U-shaped bolt F, and the front bar of the body or seat-frame is provided at its center with the forwardly-projecting parallel ears R R, which bear, respectively, against the upper and lower side of the block, and are pivoted thereto by the vertical bolt *r*, whereby the body or seat-frame is capable of both vertical and lateral movement.

The inner ends of the coiled springs M M are extended rearwardly to form the supporting-arms S S, which are provided at their extremities with depending links T T, having hooks *t t* on their lower ends, and the horizontal portions of the side bars or straps P P are provided with rings, eyes, or loops V V to be engaged by the hooks on these links, whereby the body or seat-frame is supported. A series of these rings, eyes, or loops are provided, whereby the seat may be elevated or lowered to suit the rider, it being evident that if the

rings, eyes, or loops at the rear ends of the series are engaged the seat will be held higher than if those at the front end of the series are engaged.

5 It will be evident from the above description that the seat is supported by the coiled springs, which yield as the vehicle passes over uneven ground, thereby preventing the jar of the vehicle from annoying the rider, and the
10 connection of the body or seat-frame to the cross-bar prevents the horse-motion from being communicated thereto.

This invention is an improvement upon that shown and described in Letters Patent No.
15 388,835, granted to me September 4, 1888, the improvements consisting, essentially, in the manner of suspending the body or seat from the thills, whereby the former may be vertically adjusted without the use of the lever
20 and toothed sector described in the said Letters Patent. The adjusting device herein described is simple and inexpensive, and at the same time effective and durable, and it is so arranged as to obviate the necessity of the
25 usual side bars which are described in the patent.

The construction and combination of the thills, cross-bar, and curved brace, and the peculiar manner of swiveling the front bar of
30 the body or seat-frame to the cross-bar, are old, as shown in the previous patent, and therefore are not claimed herein.

Having thus described the invention, I claim—

35 1. In a road-cart, the combination of the body or seat-frame swiveled for lateral movement at its front end to the thills, the springs attached to the thills and provided with supporting-arms extending over the side bars of
40 the body or seat-frame, and the loose links connected at their upper ends to the supporting-arms and at their lower ends to the said side bars or straps, substantially as specified.

2. In a road-cart, the combination of the
45 body or seat-frame swiveled at its front end to the cross-bar, the transverse shaft attached at its ends to the thills and extending over the body or seat-frame, the springs coiled on the said shaft and provided with supporting-
50 arms which extend over the body or seat-frame, and the links connecting the free ends of the supporting-arms to the body or seat-frame, substantially as specified.

3. In a road-cart, the combination of the body or seat-frame provided with a front bar 55 which is connected to the cross-bar to the thills, the transverse shaft arranged between the thills, the springs coiled on the said shaft and provided with supporting-arms, the series of rings, eyes, or loops on the body or seat- 60 frame beneath the supporting-arms, and the links depending from the extremities of the supporting-arms and provided at their lower ends with hooks to engage the said rings, eyes, or loops, substantially as specified. 65

4. In a road-cart, the combination, with the thills having a cross-bar C, of the transverse shaft connected to the thills in rear of the cross-bar, the body or seat-frame having the front bar O swiveled at its center to the cross- 70 bar, the U-shaped side bars or straps P, which depend from the extremities of the front bar, pass under the said shaft, and are connected at their rear ends by the seat, the springs coiled on the extremities of the said shaft, at- 75 tached rigidly at their outer ends to the thills, and provided with the rearwardly-extending supporting-arms S S, the rings, eyes, or loops V V, arranged in series on the side bars or straps under the free ends of the support- 80 ing-arms, and the hooks connecting links T T, depending from the extremities of the supporting-arms and engaging the said rings, eyes, or loops, substantially as and for the purpose specified. 85

5. In a road-cart, the thills, the cross-bar connecting the thills, the curved brace E, connected at its ends to the thills and arranged at its center in contact with the center of the cross-bar, the U-shaped bolt connecting the 90 centers of the cross-bar and the curved brace, the hook-plate affixed to the upper side of the cross-bar at its center and provided with a hook i, and the brace-rods attached at its ends to the thills in rear of the cross-bar and looped 95 at its center over the hook i, in combination with the body or seat-frame connected to the cross-bar, substantially as and for the purpose specified.

In testimony that I claim the foregoing as 100 my own I have hereto affixed my signature in presence of two witnesses.

JOHN W. COOMBE.

Witnesses:

C. H. PRATHER,
CHAS. WINE.