(No Model.)

C. FAHRNEY.

ROAD CART.

No. 490,278. Patented Jan. 24, 1893.

Fig. 1

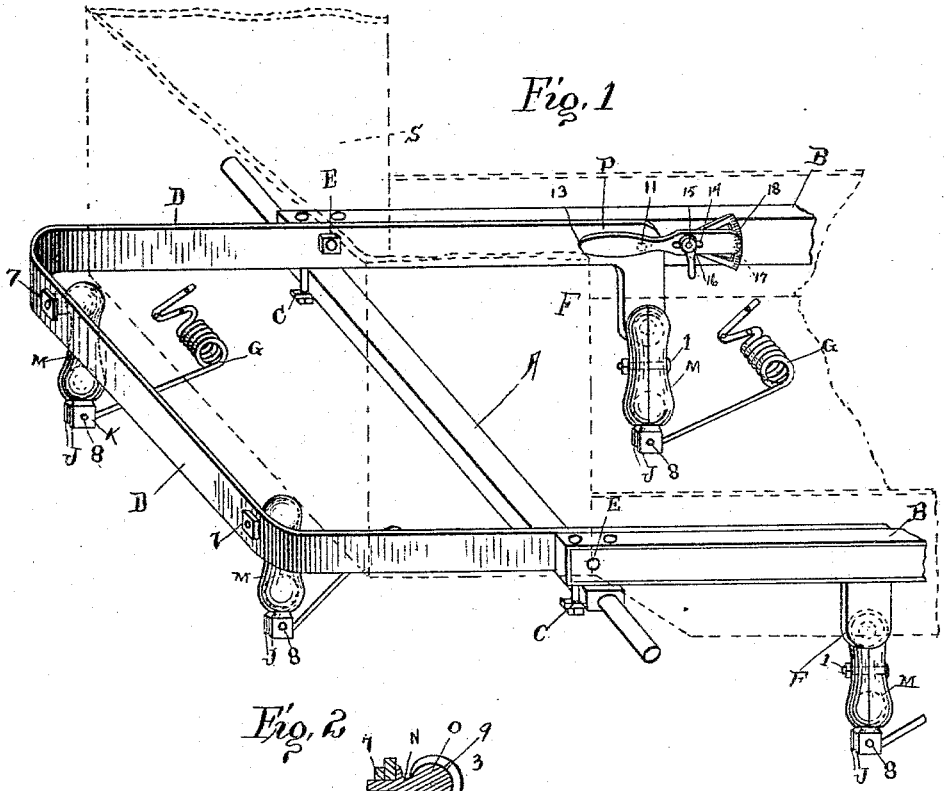


Fig. 2

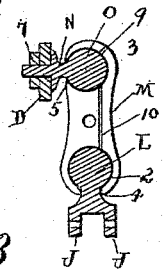
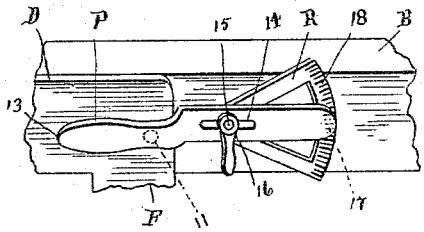


Fig. 3



Witnesses
H. P. Stilson
N. Hume Clendenin

Inventor
Callo Fahrney
per John G. Manahan
his Attorney

UNITED STATES PATENT OFFICE.

CALLO FAHRNEY, OF POLO, ILLINOIS.

ROAD-CART.

SPECIFICATION forming part of Letters Patent No. 490,278, dated January 24, 1893.

Application filed September 15, 1892. Serial No. 445,979. (No model.)

To all whom it may concern:

Be it known that I, CALLO FAHRNEY, a citizen of the United States, residing at Polo, in the county of Ogle and State of Illinois, have invented certain new and useful Improvements in Road-Carts; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention has reference to road carts, and consists in certain improvements upon the cart for which I was granted Letters Patent of the United States No. 431,569, on July 8, 1890, and relates to an improved mode of changing the altitude and position of the body of the vehicle to suit the varying heights of different animals attached thereto. This improvement is attained by the use of an adjustable pawl, carried upon the pivoted frame which supports the body, and screwed at optional points upon a fixed ratchet attached to the frame of the vehicle. In the former construction, leather supporting pieces were used as part of the means of supporting and varying the altitude of the vehicle body, and, while the same operated satisfactorily, there were objections thereto on account of the supposed perishable nature, or lack of durability, of such leather. The former supports were toggled joints, and like in the case of all supports of that character, it was substantially impracticable to lubricate the bearing surfaces, or to exclude dust and grit therefrom, and the latter would, therefore, grind more or less upon each other. The first objection is herein obviated by the employment of a metallic adjustment for the vehicle body, easily accessible and readily operated. The objection to toggle supports is herein removed by the employment of the double ball and socket bearings aforesaid, which not only afford double, universal joints at each point of the vehicle support, but also are adapted to retain the lubricating oil, and their tops being closed, mud and dust falling thereon, fall therefrom without entering into the operating cavities.

Inasmuch as the general construction of the vehicle, outside of said improvements, is fully shown and described in the aforesaid patent, it will not be necessary herein to show or describe the same any further than to render intelligible the construction, adjustment, and operation of my present invention. I attain the objects, before mentioned, by the mechanism illustrated in the accompanying drawings, in which

Figure 1 is a perspective of a portion of a road cart provided with my invention. Fig. 2 is a detail of the ball and socket supports aforesaid. Fig. 3 is a detail of the vehicle body adjusting devices before mentioned.

Similar letters and figures refer to similar parts throughout the several views.

A is the axle of the vehicle, suitably supported upon the carrying wheels, and S the body thereof.

B is the rearward prolongation of the thill, herein called thill plate, and which is preferably constructed of angle iron with a wood filling in the angle thereof, as shown in said former patent, and the rear end of the thill plate B is seated upon the axle A by means of a clip C passing down through said wooden filling, and the horizontal portion of the thill B and around said axle.

D is a three-sided, metallic frame, consisting of a plate set edgewise, and having a closed rear end, and its open ends projected forward over the axle A, and for a short distance along the inside of the rear end of the thill plate B. The frame D is pivoted on each side, over axle A, by means of a transverse bolt E, passed through said frame and the wooden filling and the vertical portion of the rear end of the thill plate B. The forward ends of the frame D project a short distance in front of the axle A and have, respectively, a short turn downward F. The springs G are attached to the body of the vehicle, as in said former construction, and their rear ends, respectively, are pivotally seated between the opening ears J—J of a supporting ball clip K, having formed on its upper end a ball L.

M is a metallic box, necessarily cast in two halves, and held together by a transverse bolt 1, and provided internally with the lower ball chamber or socket 2, and the upper ball socket 3. The socket 2 has an opening 4 at its lower end, to receive the neck of the ball clip K,

and the upper socket 3 has an opening 5 at its side, to receive the neck of a ball bolt N, the ball O of which is seated in socket 3, and the body of the bolt passed transversely through the adjacent part of the frame D, and secured therein by a suitable nut 7. At the rear springs G, the ball bolt N is passed through the transverse or rear portion of the frame D, and at the front springs said ball bolt N is passed transversely through the depending ends F of frame D. The springs, in each case, are similarly seated between the ears J—J of the ball clip K, by means of the transverse bolt 8 passing through a suitable opening in the end of the spring and a corresponding opening in said ears.

In the upper end of each of the boxes M there is laterally formed an oil opening 9, within which oil is given to the upper socket 3, and the waste oil from said socket is permitted to pass down through a leak conduit 10, leading from the socket 3 to socket 2. The upper end of the box M being closed, mud and dirt deposited thereon fall off without entering within the ball cavities below.

As a means of adjusting the relative height of the vehicle body, a short lever P is pivotally seated in the face of the frame D, at or near each of the angles formed by the downward turn F. A boss 11 is formed on the side of the lever P, near the center of the latter which enters an opening in the frame D and the rear end or handle 13 of said lever is thrown somewhat from the frame D for convenience in grasping. The lever P has a pivotal attachment to thill plate B, by means of a slotted opening 14 through the lever and a hole in the thill plate, in which opening and hole is inserted a bolt 15 having on its inner end a nut 16, provided with a short handle integral therewith. Corrugations 17, on the inner side of the front end of lever P engage serrations 18, formed on the ratchet plate R rigidly fastened against the inner face of the thill plate B. By slightly loosening the nut 16 and grasping the handle 13 of lever P, the end 13 thereof can be moved upward or downward, pivoting on the bolt 16, and the front end of the frame D be carried with the handle 13 by means of the boss 11 and opening connection aforesaid, the corrugations 17 passing over the serrations 18, and taking in the proper ones when the bolt is re-tightened. The lever P is seated, as aforesaid, on each side of the vehicle, convenient to access and very readily operated and adjusted. The ball and socket connections aforesaid, preclude the jars and oscillations of the frame D from being communicated to the body.

What I claim as my invention, and desire to secure by Letters Patent of the United States, is

1. The combination of the thill plate B suitably seated on the carrying axle A, a frame D pivotally attached to said plate over said axle, ratchet R seated on said plate, lever P pivotally seated on frame D, and also pivotally connected to thill plate B and adapted to engage ratchet R and adjustably lock frame D to thill plate B; substantially as shown, and for the purpose described.

2. The combination of a rigidly supported thill plate B provided with a ratchet plate R, the body-supporting frame D centrally pivoted over or near the axle of the vehicle, lever P pivotally seated on the front end of frame D, and provided with corrugations 17 and handle 13, and a bolt 16 adapted to adjustably lock plate B and lever P forward of the pivotal seat of the latter and near the forward ends of said lever; substantially as shown, and for the purpose described.

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

CALLO FAHRNEY.

Witnesses:
J. H. SMITH,
C. E. SMITH.