

D. M. PARRY.
FOUR WHEELED VEHICLE.

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UNITED STATES PATENT OFFICE.

DAVID M. PARRY, OF INDIANAPOLIS, INDIANA.

FOUR-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 458,989, dated September 1, 1891.

Application filed April 18, 1891. Serial No. 389,447. (No model.)

To all whom it may concern:

Be it known that I, DAVID M. PARRY, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Four-Wheeled Vehicles; and I do hereby 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.

This invention relates to vehicles, and has special reference to improvements in fifth-wheels when applied to vehicles having inwardly-cranked axles, the objects of the invention being to provide a construction in which the axle is cranked laterally to enable the hanging of a semi-elliptic spring at a point below the central line of said axle, thus allowing the body of the vehicle to be hung low without interfering with the action of the spring, and also allowing the central longitudinal line of the spring to be central with relation to the wheels, so that the weight will be exerted centrally and a wrenching side strain avoided.

A further object of this invention is to pivotally connect the reach to the axle, so that the pivotal point will be to the rear of said axle, and to so construct and arrange the fifth-wheel that its pivotal point will also be in the rear of the axle and vertically aligned with the pivotal point of the reach.

With these objects in view this invention consists, essentially, in the special construction and in the combination and arrangement of the several parts of the vehicle, substantially as hereinafter described and claimed.

Figure 1 represents a vertical cross-section of a portion of a vehicle as provided with my improvements, the line of intersection being through the dotted line 3 3; Fig. 2, a plan view of a portion of same, showing parts of the device broken away to more clearly illustrate the construction.

In the drawings, A represents the front axle, which will be bent inward to bring the main central portion *a'* considerably in the rear of the spindles which form the wheel-axes, and B represents a semi-elliptical spring secured centrally with relation to the spindles of the axle by means of shackles C, which

are clipped to the spindles in the usual manner. The shackles extend a considerable distance below the lower line of the axle and terminate with a cross-bolt, to which the ends of the spring are fastened. A vehicle in which the body is hung low is thus secured. The spring is suspended between the two spindles on a direct central line between the centers of the two wheels, and by cranking the axle laterally is allowed unobstructed vertical movement, and by means of the double-hinged connection afforded by the shackle is free to move longitudinally to accommodate itself to the load.

B' is the head-block, which instead of being interposed between the spring and fifth-wheel above the fifth-wheel is located below the latter, and the upper circle of the fifth-wheel is fastened directly to the under side of the vehicle-body without the necessity of an interposing head-block.

D is the fifth-wheel, of which D' is the upper segment, which will be secured to the under side of the body E by bolting it thereto, and may be fastened to the body in a very secure and substantial manner. The lower segment D² of the fifth-wheel will be clipped to the head-block and spring in the usual manner, and the two segments will be connected by the bolt *b* through their common axial centers and will form the pivotal point around which the two segments will horizontally move. The segments will be held together at their peripheries by a series of clamps *f*, which will also serve to relieve the pivotal bolt of part of the strain and wear. The front and rear axles are connected by the reach G, which must be pivotally connected with the front axle in order to turn the vehicle.

In the construction shown, which by changing the pivotal point to the rear is an improvement on the construction shown in Patent No. 435,366, dated August 26, 1890, granted to myself and Daniel S. Reel, H is a two-part saddle hinged together in front and having rearwardly-projecting arms *h*, with a vertical hole therethrough to secure a bolt which will serve to clamp the saddle to the axle by drawing the two arms together, and will also, by passing through the bifurcated ends *g* of the reach, serve to pivotally connect the reach to

the saddle. A spur on the inner face of the saddle to enter a corresponding detent in the axle will hold the axle from turning in the saddle. It is obvious that the two sections of the saddle might be bolted together in front instead of being hinged. It is therefore not desired to limit this invention to any special form of connection between the reach and axle so long as it is a pivotal connection. It is also important for the perfect working of the vehicle that the pivotal points of the reach and of the fifth-wheel be in direct vertical alignment. A jointed connection with two remote vertical centers would bind and lock itself and the device be inoperative, or practically so.

It is not desired to limit this invention to the exact form of fifth-wheel here described, nor to the exact construction of the reach attachment; but

What I do claim as new, and wish to secure by Letters Patent of the United States, is—

1. In a vehicle, the combination, with the rearwardly-cranked axle, a semi-elliptical spring hung by double shackles between the spindles on a line central with relation to the wheels, a fifth-wheel secured directly to the wagon-body and having its pivotal point to the rear of the axle, and a head-block between said spring and fifth-wheel, of a reach secured to the axle and having a pivoted point to the rear thereof in direct vertical alignment with the pivot of the fifth-wheel, substantially as described.

2. In a vehicle, the combination, with the rearwardly-cranked axle and a semi-elliptical spring hung by double shackles between the spindles on a line central with relation to the wheels, of a fifth-wheel consisting of upper and lower segments, said upper segment being secured directly to the vehicle-body, a series of clamps extending around the peripheries of said segments, a bolt extending through the common axial centers of said segments, and a head-block interposed between said lower segment of the fifth-wheel and said

spring, to which head-block and said spring said lower segment is clipped.

3. A vehicle having a rearwardly-cranked axle and a spring hung between the spindles on a line central with relation to the wheels, a fifth-wheel having a pivotal point to the rear of the axle, and a reach secured to the axle and having a pivotal point to the rear thereof in direct vertical alignment with the pivot of the fifth-wheel.

4. In a vehicle, the combination, with the rearwardly-cranked axle, a semi-elliptical spring hung by double shackles between the spindle on a line central with relation to the wheels, a fifth-wheel secured directly to the wagon-body and having its pivotal point to the rear of the axle, and a head-block between said spring and the fifth-wheel, of a clip or saddle constructed to encircle said axle and having a spur to enter a detent in the axle, rearwardly-projected arms integral with the saddle, a reach having a bifurcated forward end to receive said arms, and a bolt extending through said reach and arms in direct vertical alignment with the pivotal point of the fifth-wheel, and serving to pivotally secure said reach and arms together, all substantially as shown and described.

5. In a vehicle, a rearwardly-cranked axle and a semi-elliptical spring hung by double shackles between the spindles of the axle, in combination with a reach connected directly to the axle and having a pivotal joint to the rear of said axle and a fifth-wheel having a pivotal point to the rear of the point of its attachment with the springs and in vertical alignment with the pivotal points of the reach, substantially as and for the purposes described.

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

DAVID M. PARRY.

Witnesses:

JOSEPH A. MINTURN,
FRED. S. KNODLE.