

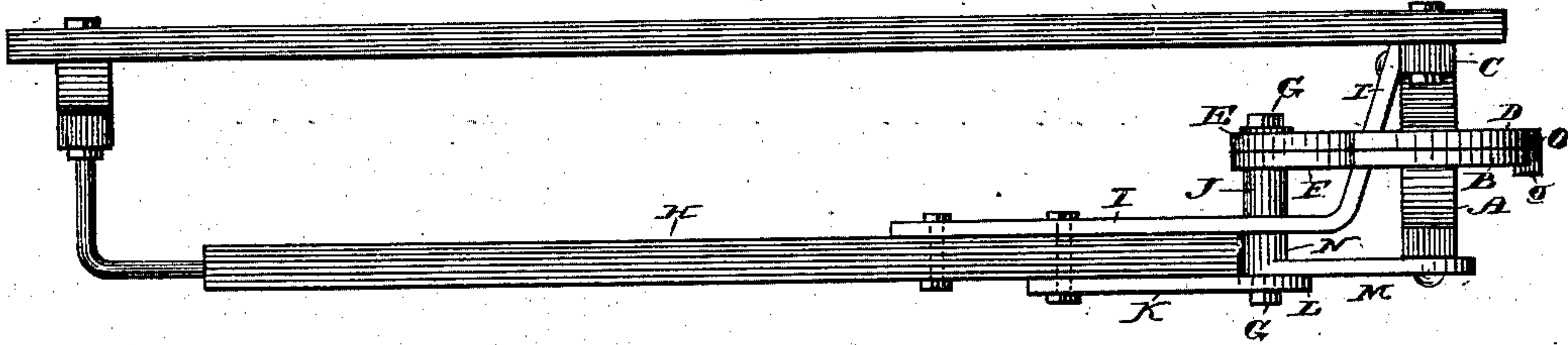
(No Model.)

G. W. MART.  
SPRING VEHICLE.

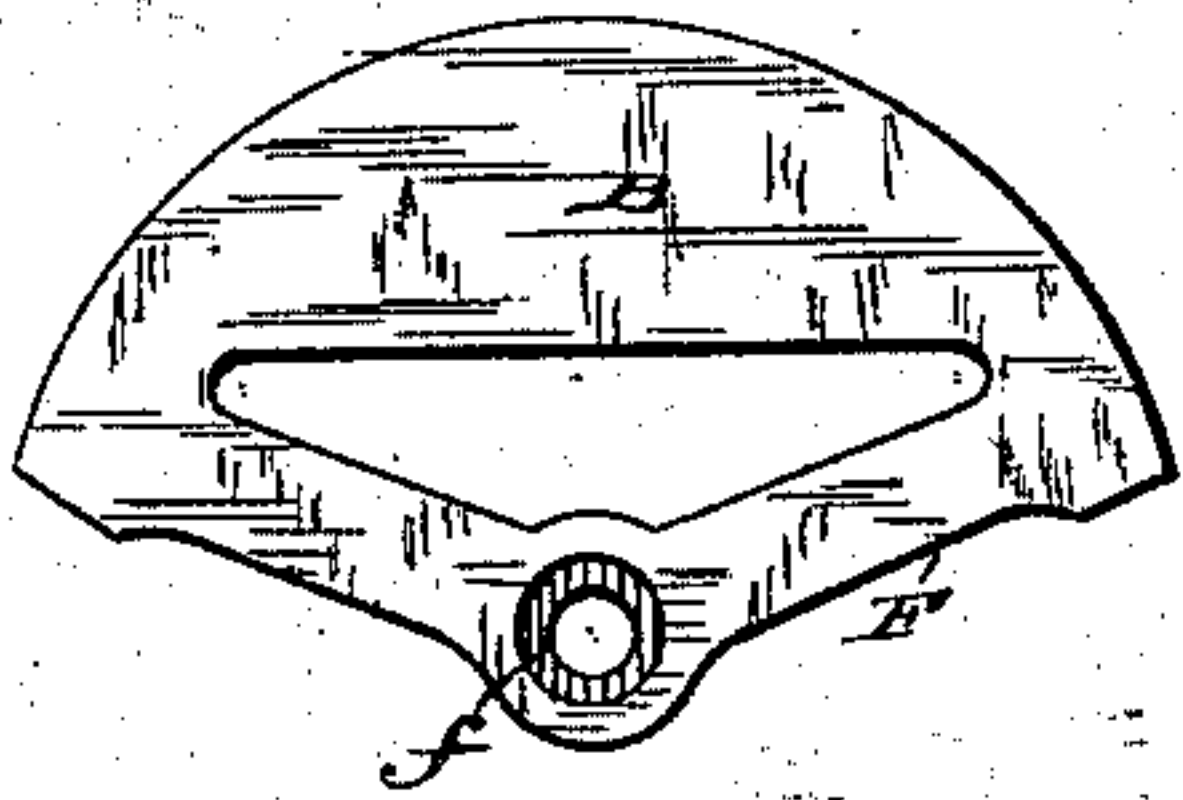
No. 284,455.

Patented Sept. 4, 1883.

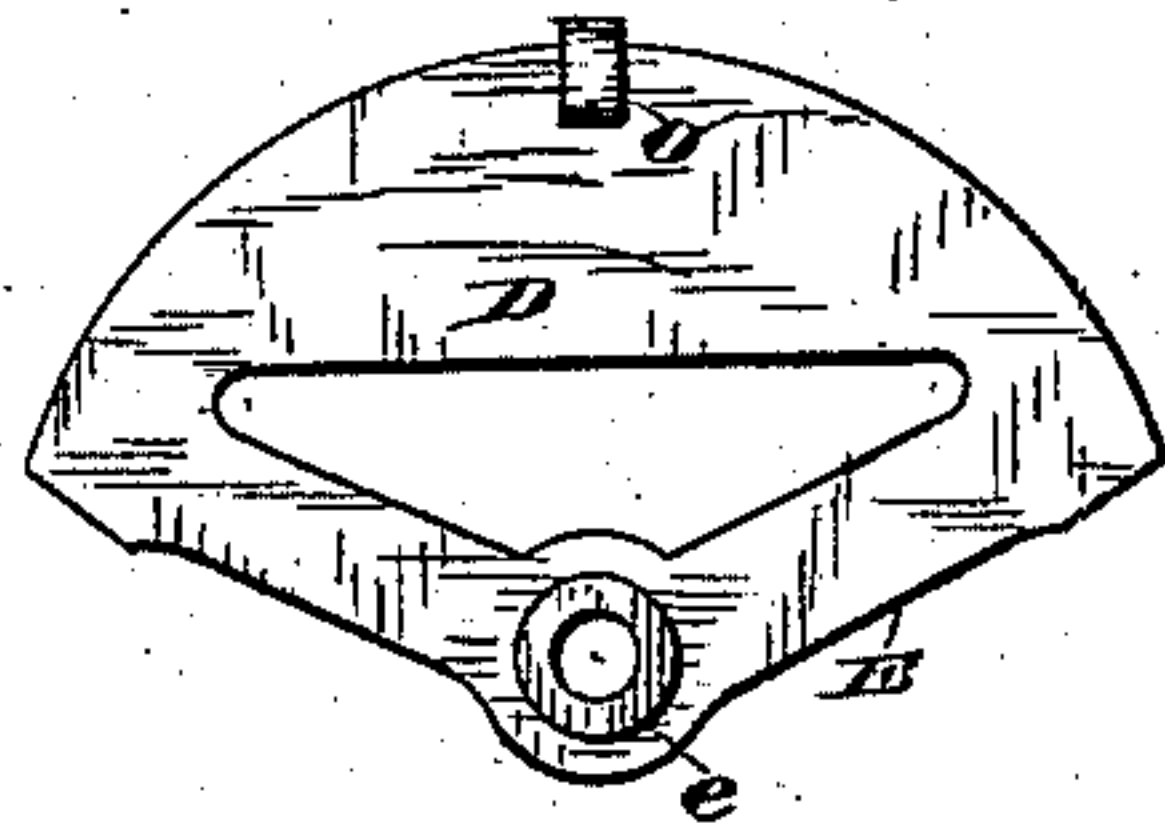
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



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# UNITED STATES PATENT OFFICE.

GEORGE W. MART, OF HENDERSON, KENTUCKY, ASSIGNOR OF ONE-THIRD  
TO GEORGE DELKER, OF SAME PLACE.

## SPRING-VEHICLE.

SPECIFICATION forming part of Letters Patent No. 284,455, dated September 4, 1883.

Application filed February 13, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE WILLIAM MART, a citizen of the United States, residing at Henderson, in the county of Henderson and State of Kentucky, have invented a new and useful Improvement in Spring-Vehicles, of which the following is a specification.

My invention relates to an improved device by which the pivot-point of vehicles is placed behind the forward axle, allowing the wheels thereon to turn in much less space, and also, when a reach is employed, for combining therewith certain braces or stays which form a truss support and coupling between the reach and the wear-irons; and it consists in placing the wear-irons or fifth-wheels between the head-block and the forward axle, so that the pivot-point through which the king-bolt passes is in the rear of said head-block and axle, the upper bracket of the wear-iron being provided with a male part which fits into a female portion on the lower bracket. Secured to the rear of the head-block is a support or brace, which extends downwardly and rearwardly along the upper side of the reach, to which it is fastened. An arm secured to the lower portion of the axle extends to the pivot-point and is provided with an eye, through which the king-bolt passes. A plate secured to the under side of the reach constitutes a support for said arm and a bearing for the king-bolt.

Figure 1 is a side elevation of the device applied to a side-bar vehicle. Figs. 2 and 3 are detail views of the wear-irons and their brackets.

A is the forward axle, to the upper portion of which is attached the lower wear-iron, B.

C is the head-block, to the lower portion of which is attached upper wear-iron, D.

E and F are the upper and lower brackets, extending from the ends of the wear-irons to a pivot-point, the upper bracket, E, being provided at its point with a male part, *e*, fitting into a female part, *f*, in the lower bracket, F, at its point, the said brackets E and F being provided at their points with eye-holes, through which the king-bolt G passes.

When a central drop-perch is used, I employ the following device, which serves as a

truss-support and a coupling between the fifth-wheels and the perch: To the upper portion of the drop-perch H is secured a stay or brace, I, which, after extending for a portion of its length past the terminus of the perch, is bent upward and fastened to the head-block C. The said brace is provided with an eye-hole, through which the king-bolt G passes. A block, J, perforated to receive the king-bolt G and situated between the wear-irons and the brace I, serves as a means of support to the former. A brace, K, secured to the lower portion of the perch, and having a boss, L, provided with an eye-hole for the reception of the king-bolt G, extends beyond the said perch, and serves as a support to an arm, M, which is secured to the lower portion of the axle, and, extending rearwardly, terminates in a boss, N. The boss N is also provided with an eye-hole, which receives the king-bolt G. Upon the middle of the upper semicircular wear-iron is secured a lug, O, which is provided with a lip, *o*, which projects under the lower side of the lower wear-iron and serves to connect them. It will be seen by this arrangement of the fifth-wheel and the drop-perch, together with the supporting-brace and connecting-arm, that greater strength is secured to the pivotal bearings than where the perch is attached directly to the bolster. The drop-perch in this connection permits the hanging of the body of the carriage lower than usual, so that the said body will not interfere with the perch when the springs are in motion; and this, together with the improved fifth-wheel, forms a double advantage not heretofore obtained. It is also evident that the male and female parts I have described form a thoroughly substantial bearing for the joining parts of the running-gear.

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

1. The combination, with the wear-irons secured to the axle and head-block, respectively, and having V-shaped rearwardly projecting brackets, of a drop-reach rigidly connected to the head-block by a brace passing downward through the V-shaped braces and



along the upper side of the reach, as and for the purpose set forth.

2. The combination of wear-irons B and D, situate between the axle and head-block, and  
5 having brackets E and F terminating in a pivot-point, and brace I, secured to the reach and head-block, supporting-block J, arm M,

provided with the boss N, and stay K, secured to the lower side of the reach.

GEO. W. MART.

Witnesses:

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GEORGE DELKER.