

(No Model.)

2 Sheets—Sheet 1.

H. CLARK.
VEHICLE GEAR.

No. 377,190.

Patented Jan. 31, 1888.

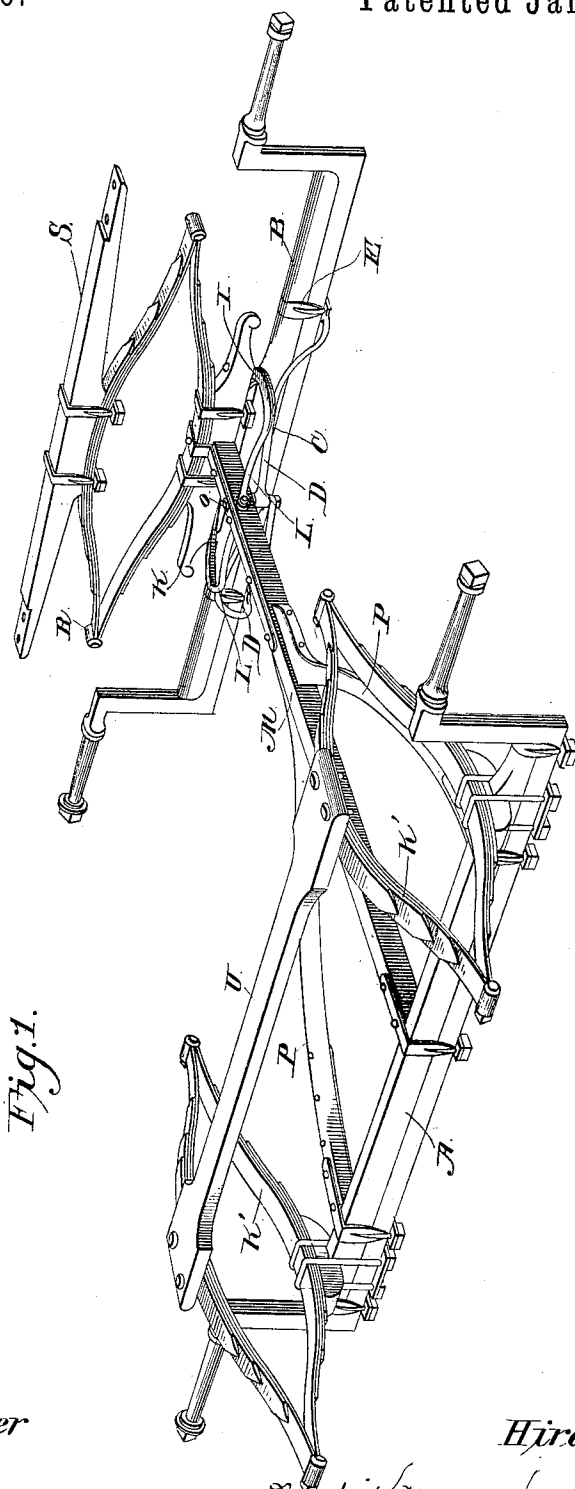


Fig. 1.

Witnesses
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E. J. Siggers

Inventor
Hiram Clark

By his Attorneys

C. A. Howells

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2 Sheets—Sheet 2.

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Fig. 2.

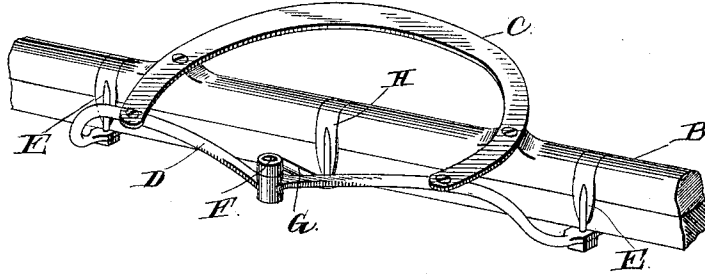
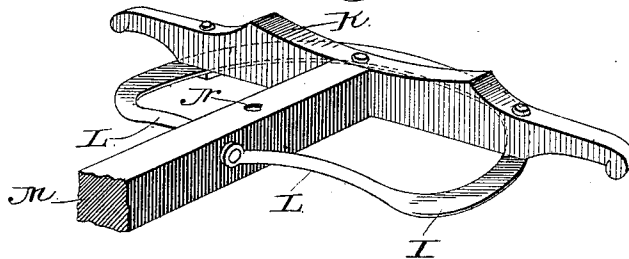


Fig. 3.



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UNITED STATES PATENT OFFICE.

HIRAM CLARK, OF AUGUSTA, MAINE.

VEHICLE-GEAR.

SPECIFICATION forming part of Letters Patent No. 377,190, dated January 31, 1888.

Application filed July 28, 1887. Serial No. 245,542. (No model.)

To all whom it may concern:

Be it known that I, HIRAM CLARK, a citizen of the United States, residing at Augusta, in the county of Kennebec and State of Maine, have invented a new and useful Improvement in Vehicle-Gears, of which the following is a specification.

My invention relates to an improvement in vehicle-gears; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a vehicle-gear embodying my improvements. Fig. 2 is a detached perspective view of the lower half of the circle or fifth-wheel, showing the same attached to the front axle. Fig. 3 is a similar view of the upper half of the circle or fifth-wheel, showing the same attached to the spring-block and to the reach.

A B represent the front and rear axles respectively, which are cranked, as shown, and thereby their central portions are brought as near the ground as possible. The said axles are provided with wheels.

C represents the lower half of the circle or fifth-wheel, which is secured on the upper side of the front axle and has arms which project rearward therefrom.

D represents a brace-rod, which is bent in the form shown, has its ends attached to the front axle, near the ends thereof, by means of shackles E, and is provided at its center with an eye or opening, F, from the front side of which projects an arm, G, that extends under the center of the front axle, and is secured thereto by means of a shackle, H.

I represents the upper portion of the fifth-wheel or circle, which is attached to the under side of the bolster-block K. The ends of the said upper portion of the said fifth-wheel or circle are provided with rearward-extending curved arms L, which bear against opposite sides of the reach M and are bolted thereto. At a suitable distance from the front end of the reach is a vertical opening, N, which registers with the eye or opening F of the brace-rod D. The king-bolt O passes through openings N and F, and thereby pivotally connects the front axle to the reach at a point considerably in,

rear of the front axle. The rear end of the reach is attached to the center of the rear axle in the usual manner, and hounds or side braces, P, connect the reach and the rear axle, as shown.

R represents the front spring, which is secured on the upper side of the bolster-block K at the center thereof, and has the spring-bar S attached to its upper side. Rear springs, K', are secured on the rear axle at right angles thereto, and have their upper sides connected by a transverse spring-bar, U. The body of the vehicle will be secured on the gear by bolting the same to the spring-bars S and U, in the usual manner.

I do not desire to limit myself to the use of the elliptic springs shown in the drawings and hereinbefore described, as side springs may be substituted in lieu thereof without departing from the spirit of my invention.

By providing the crank-axles the weight of the body of the vehicle is evenly distributed to both axles, and, moreover, the body is brought very near the ground, and is thus enabled to be loaded and unloaded with very little lifting.

A vehicle thus constructed will be found extremely serviceable as a delivery-wagon, may be turned in a small space, runs very easily, and is very strong and durable.

Having thus described my invention, I claim—

1. In a vehicle-gear, the combination of the front axle, the circle C, secured thereto and having the rearward-extending arms, the brace-rod D, secured to the front axle, arranged on the rear side thereof, connected to the rear arms of circle C, and having the central opening, and the reach M, having the circle I attached to its front end and bearing on circle C, and provided, further, with the opening N at a distance from its front end, registering with the central opening in the brace-rod, and adapted for the reception of the king-bolt, substantially as described.

2. The combination of the front axle, the circle C, secured thereto and having the rearward-extending arms, the brace-rod D, secured to the front axle, arranged on the rear side thereof, and connected to the rear arms of circle C, the arm G, extending rearward from the center of the front axle and having its rear end resting on the center of the rod D, the reach

M, having the circle I at its front end bearing on circle C, and the king-bolt passing through an opening in the reach at a distance from the front end thereof and through registering openings in the rear end of arm G and center of rod D, substantially as described.

3. The combination of the crank-axles A B, the reach M, having its rear end attached to axle A, the circle C, attached to axle B and having the rearward-extending arms, the rod D, attached to axle B, arranged on the rear side thereof, and connected to the arms of circle C, the arm G, extending rearward from the center of axle B and having its rear end resting on the center of rod D, the circle I, having the arms L attached to the reach, the bolster-block R, secured to the front end of the reach and also to the circle I, (the latter bearing on circle C,) and the king-bolt extending through an opening at a distance from the front end of the reach and through registering openings in the rear end of arm G and center of rod D, substantially as described.

4. In a vehicle-gear, the combination of the crank-axles having the depending central portions, the reach attached to the rear axle and having the opening N at a distance from its front end, the upper portion, I, of the circle or fifth-wheel attached to the front end of the reach, the lower portion, C, of the circle or fifth-wheel attached to the front axle, the brace-rod D, attached to the front axle, arranged at a suitable distance in rear thereof, and connected to the lower portion, C, of the circle or fifth-wheel, and the king-bolt passing through the opening N and through a central eye or opening, F, in the brace-rod to pivotally connect the reach to the front axle, substantially as described.

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

HIRAM CLARK.

Witnesses:

H. M. HEATH,
O. A. TUELL.