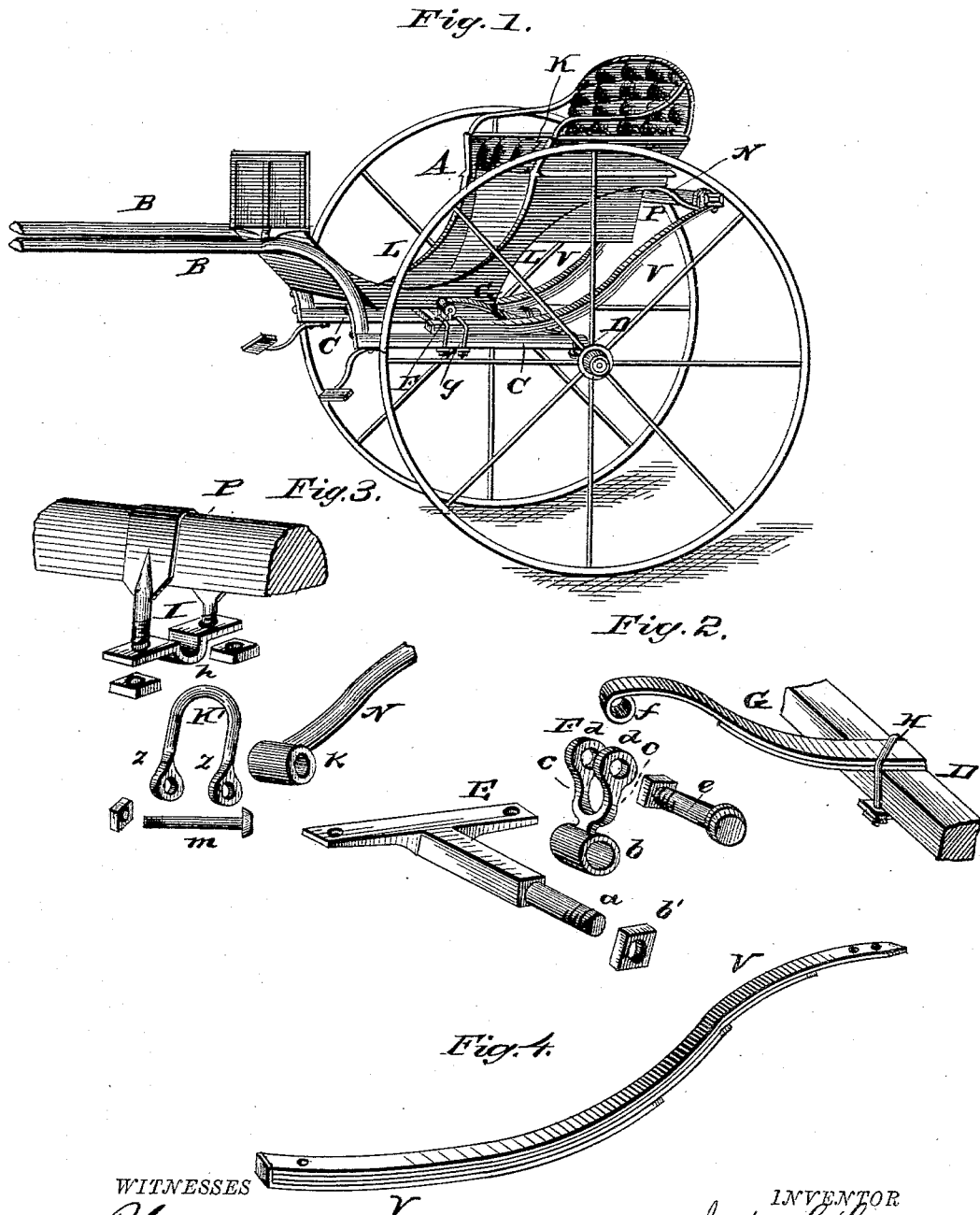


(No Model.)

J. G. GAY.
TWO WHEELED VEHICLE.

No. 303,832.

Patented Aug. 19, 1884.



WITNESSES

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UNITED STATES PATENT OFFICE.

JOSHUA G. GAY, OF OTTAWA, ILLINOIS.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 303,832, dated August 19, 1884.

Application filed April 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA G. GAY, a citizen of the United State, residing at Ottawa, in the county of La Salle and State of Illinois, have invented certain new and useful Improvements in Vehicles; 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 letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a perspective view of my vehicle. Fig. 2 is a perspective view of the spring, and Figs. 3 and 4 are detail views.

This invention has relation to two-wheel vehicles or road-carts; and it consists in the construction and novel arrangement of devices, as hereinafter set forth, and pointed out in the appended claims.

In the accompanying drawings, the letter A designates the body of the vehicle, and B the shafts, having horizontal rear extensions, C, forming side bars, which are firmly clipped to the axle D. To the sill of the body on each side is firmly secured a T-plate, E, having a pivotal portion, *a*, which is seated in the lower sleeve-bearing, *b*, of the double-clevis F, a nut, *b'*, serving to hold the clevis on the pivot *a*. The clevis F is made with the lateral branches *c*, extending upwardly and terminating in eyes, *d*, for the passage of the pivot-bolt *e*, which also passes through the eye *f* of the lateral spring G. The springs G are secured to the axle, near the points of attachment of the shaft-extensions, by means of clips H. Each spring G extends forward and upward, gradually changing in curvature from the convex to the concave form, and terminating in an eye, *f*, which, being seated between the branches of the double-clip, is connected thereto by the bolt *e*. As the T-plates E are secured to the sills of the body forward of the seat, it will be apparent that the front portion of the body is held up by the springs G through the double clevises F. The seat portion K of the body is raised above the sills L, and to the seat portion on

each side is secured a body-loop, N, which extends rearwardly under the transverse back-bar, P. This transverse bar P is secured to the rear ends of the spring V, which are clipped to the side-bar extensions of the shaft as far as the T-plates of the body. The springs V are of elongated elliptical form, and are composed of several leaves, the lower leaves being gradually shorter, or extending less and less from the front end of the spring, where the leaves are massed, and are secured to the shafts by the clips *g*. The springs G are also formed of several leaves superposed, the under leaves being shorter than the upper ones, as shown. Clipped upon the back-bar, near the points of attachment of the springs V, are the bearing-plates I, having the bearings *h*, to receive the transverse portions of the swinging clevises K', the arms of which terminate in lugs *z*. The body-loops N each terminate in an eye or loop, *k*, which extends between the eyes of the clevis K', and is connected thereto by a pivot-bolt, *m*. The shaft-springs V extend rearward and upward from their bearings on the shafts, and the axle-springs G extend forward and upward. These springs cross each other on each side of the body, and their upper ends form four points of support, from which the body is suspended by the clevises. The body is thus free to vibrate back and forth under the action of the spring, so that the jarring motion which is so objectionable in road-carts is obviated, and the rocking effect of the axle and shafts materially modified in transmission to the body, so that the latter has an easy and comfortable movement. The springs are of upwardly-curved form, and consist of several leaves, so that they adjust themselves automatically under varying weights, the bearing of the springs increasing as the load is made heavier. This vehicle will, therefore, move as easily under two occupants as when only one is riding therein.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the curved springs attached to the axle and extending forward and upward, of the double clevis and the T-

plate, whereby the end of the spring is connected to the side of the body, substantially as specified.

2. The combination, with the rear shaft-
5 extensions, the axle secured thereto, and the elevated back-bar, of the axle-springs extending forward and upward, the shaft-springs extending backward and upward, the body-loops,

and the T-plate secured to the body, substantially as specified.

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

JOSHUA G. GAY.

Witnesses:

WM. COLWELL,
JAMES McMANUS.