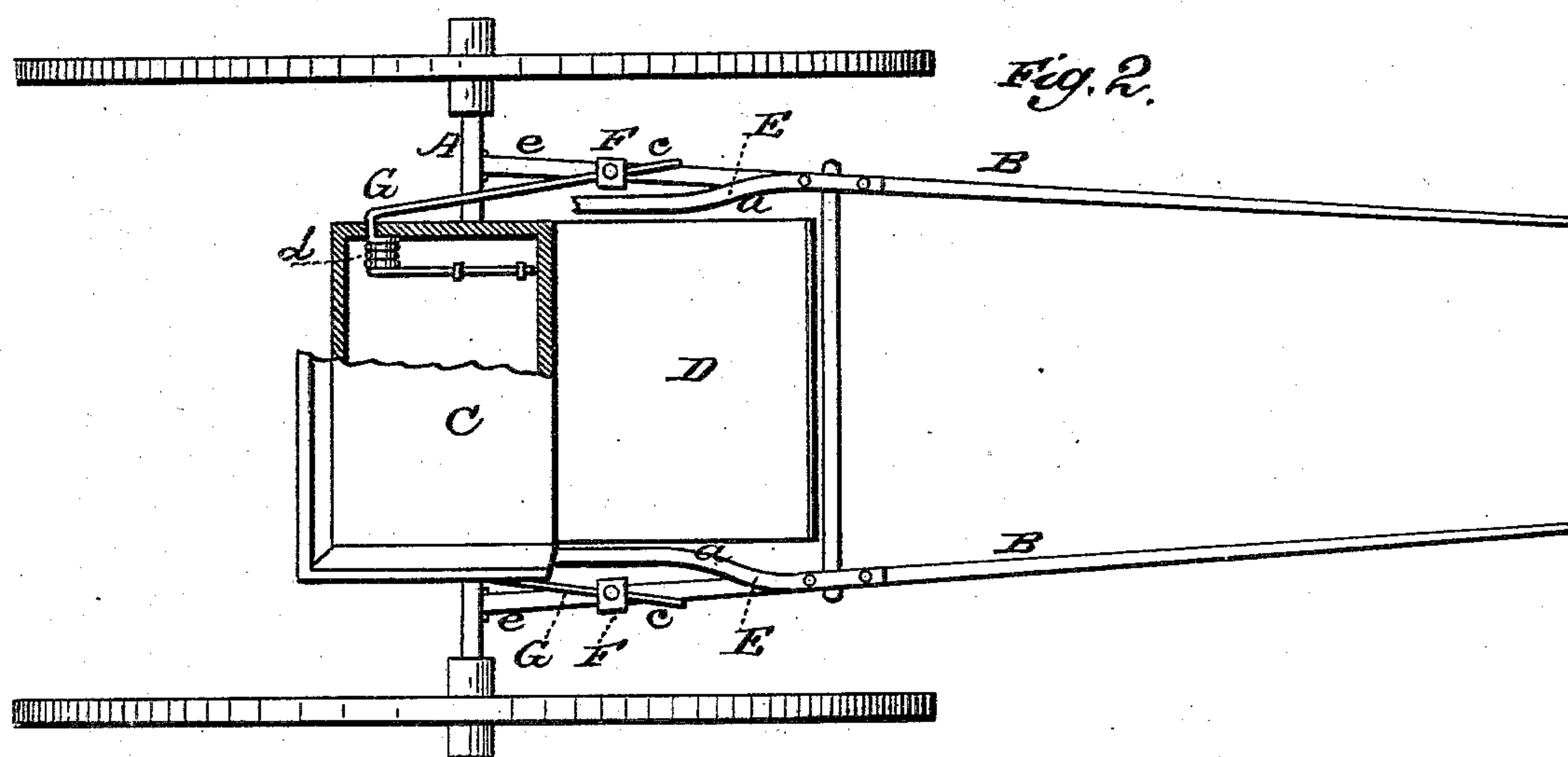
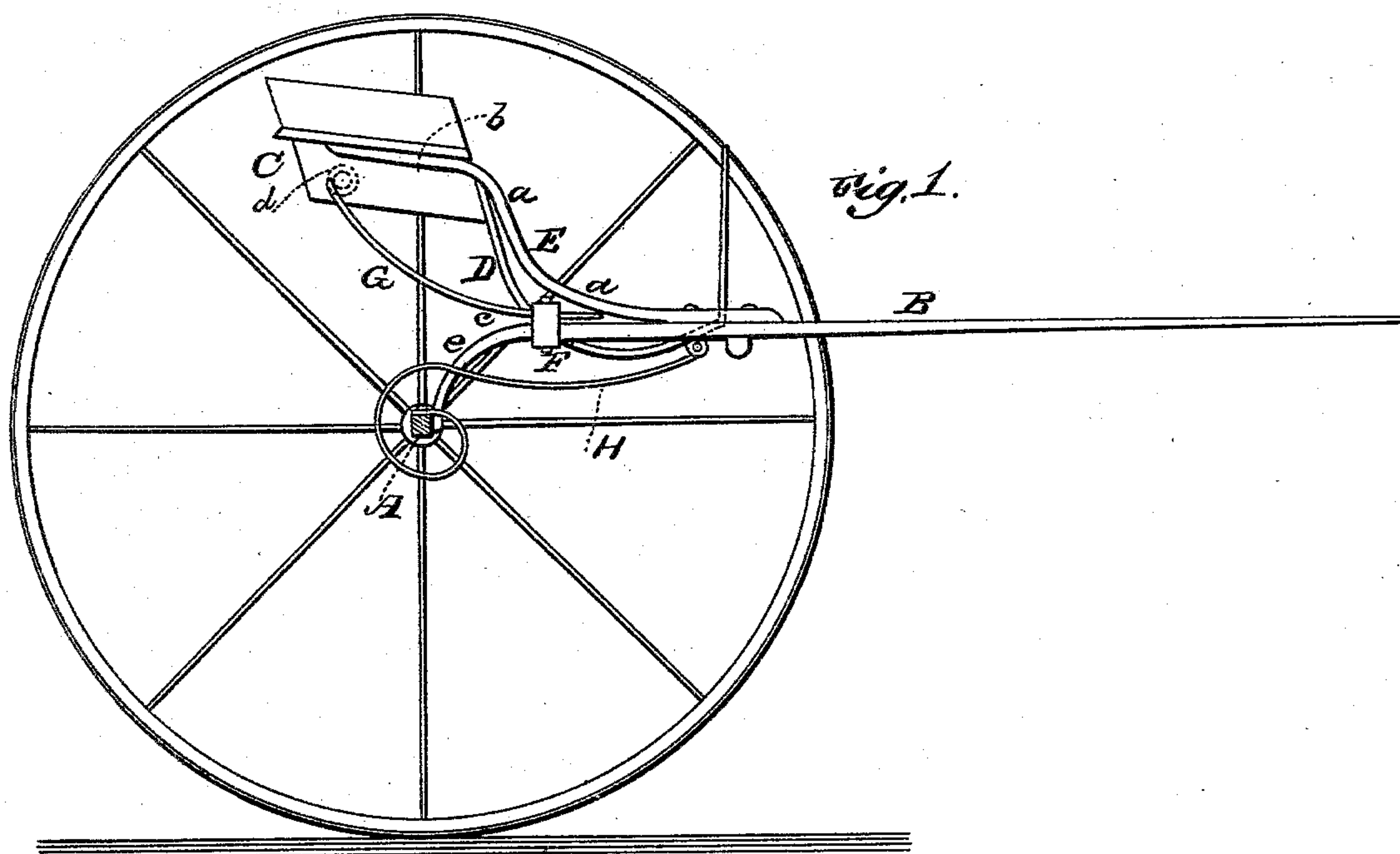


(No Model.)

J. COLLINS.
TWO WHEELED VEHICLE.

No. 281,023.

Patented July 10, 1883.



WITNESSES
E. H. Bates
Philip Massi.

INVENTOR
James Collins
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UNITED STATES PATENT OFFICE.

JAMES COLLINS, OF CRAWFORDSVILLE, INDIANA.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 281,023, dated July 10, 1883.

Application filed September 30, 1882. (No model.)

To all whom it may concern:

Be it known that I, JAMES COLLINS, a citizen of the United States, residing at Crawfordsville, in the county of Montgomery and State of Indiana, have invented a new and valuable Improvement in Road-Carts; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a vertical sectional view of my road-cart, and Fig. 2 is a top or plan view of the same.

This invention has relation to road-carts or two-wheel vehicles; and it consists in the construction and novel arrangement of the spring side bar secured to the shaft, and having a rising bend near the seat which it supports; the adjustable bearing on the shaft engaging the spring; the seat-spring rigidly secured to the seat or seat-frame, and having its movable end engaging the shaft-bearing; the coil seat-spring having an extension from the box or frame of the seat engaging the shaft-bearing; and the stay-spring extending from the drop or foot-rest of the body back to the axle, all as hereinafter set forth.

In the accompanying drawings, the letter A designates the axle; B, the shafts; C, the seat or body, and D the drop or foot-rest.

E represents the side bars, which are firmly secured to the shafts, extending back parallel therewith to points near the front of the seat, and there formed with a rising double bend, *a*, from the upper portion of which each side bar extends horizontally to the rear, the raised portion *b* serving as a bearing for the seat or body. This side bar is designed to give the seat sufficient height without forming an obstruction at the side or entrance.

F indicates a clip or bearing, which is bored or slotted to engage the seat-spring, and is fastened to the shaft in an adjustable manner, so that it can be moved backward or forward. By adjusting this bearing the seat-spring can be made more or less yielding, according to the weight to be supported.

G designates the seat-spring, which is rigidly secured at its upper end to the seat or

body, its lower end, *c*, being free or movable upon the shaft or shaft-bearing, which it engages. The upper or main portion of the seat-spring is usually constructed in spiral form, as indicated at *d*, the spiral being inclosed in the body or seat-frame, and the arm or lower portion, *e*, extending outward and downward therefrom. This spring is designed to afford a yielding support to the seat in rear, and as its arm or extension *c* bears on the rear portion of the shaft just upon or in front of the bend or arch *e*, the strain upon the shaft is reduced materially, so that it can be made light and neat in form.

H represents a stay-spring, which is attached to the drop or foot-rest frame on each side, and, extending back, is secured to the axle. These springs H are designed to hold the body in proper position, keeping it steady and preventing a twisting vibration.

Inclined spring-bars have been connected at their lower ends by bolts or clips to the shafts and extended back and over the axle to support the sulky-seat prior to my invention, and inclined seat-supporting spring-bars have been secured at and also near their lower forward ends, between the side bars of the sulky-frame, to two transverse cross-bars of said frame, and extended back and over a rear transverse bar above the axle, and connected to the rear transverse bar by downwardly, forwardly, then upwardly and rearwardly curved springs. I find, too, that a single thin plate or spring centrally located has been employed to connect the front of the body to the axle; but this last construction permits a twisting vibration of the body, which I aim to overcome. It is not intended to make claims herein for either of these constructions, as I admit that they were in use prior to my invention.

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

1. The spring side bar, E, secured to the shaft in front of the body, extending back parallel therewith, and having a rising double bend, *a*, near the front of the seat, substantially as specified.

2. The combination, with the seat and the seat-spring G, attached thereto, of the adjusta-

ble clip or bearing E, connected to the shaft and engaging the seat-spring, substantially as specified.

3. The combination, with the shafts of a two-wheel vehicle, of the seat spring or springs G, rigidly secured to the seat-frame or body, and having their arms c extending forward and downward to engage the shaft-bearings, substantially as specified.

4. The seat-spring G, having the spiral upper portion, d, seated in the body or frame of the seat, and the arm or extension c extending downward and forward therefrom, substantially as specified.

5. In a two-wheel vehicle, the combination, with the shafts, seat, and foot-rest or drop, of the double bent side bars, the rear seat-springs extending downward and forward, and the stay-springs connecting the foot-rest or drop to the axle, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

J. H. W. OWT

JAMES COLLINS.

Witnesses:

H. CAMPBELL,

JNO. A. HORNBECK.