

(No Model.)

D. LIPPY.
TWO WHEELED VEHICLE.

No. 424,488.

Patented Apr. 1, 1890.

Fig. 1.

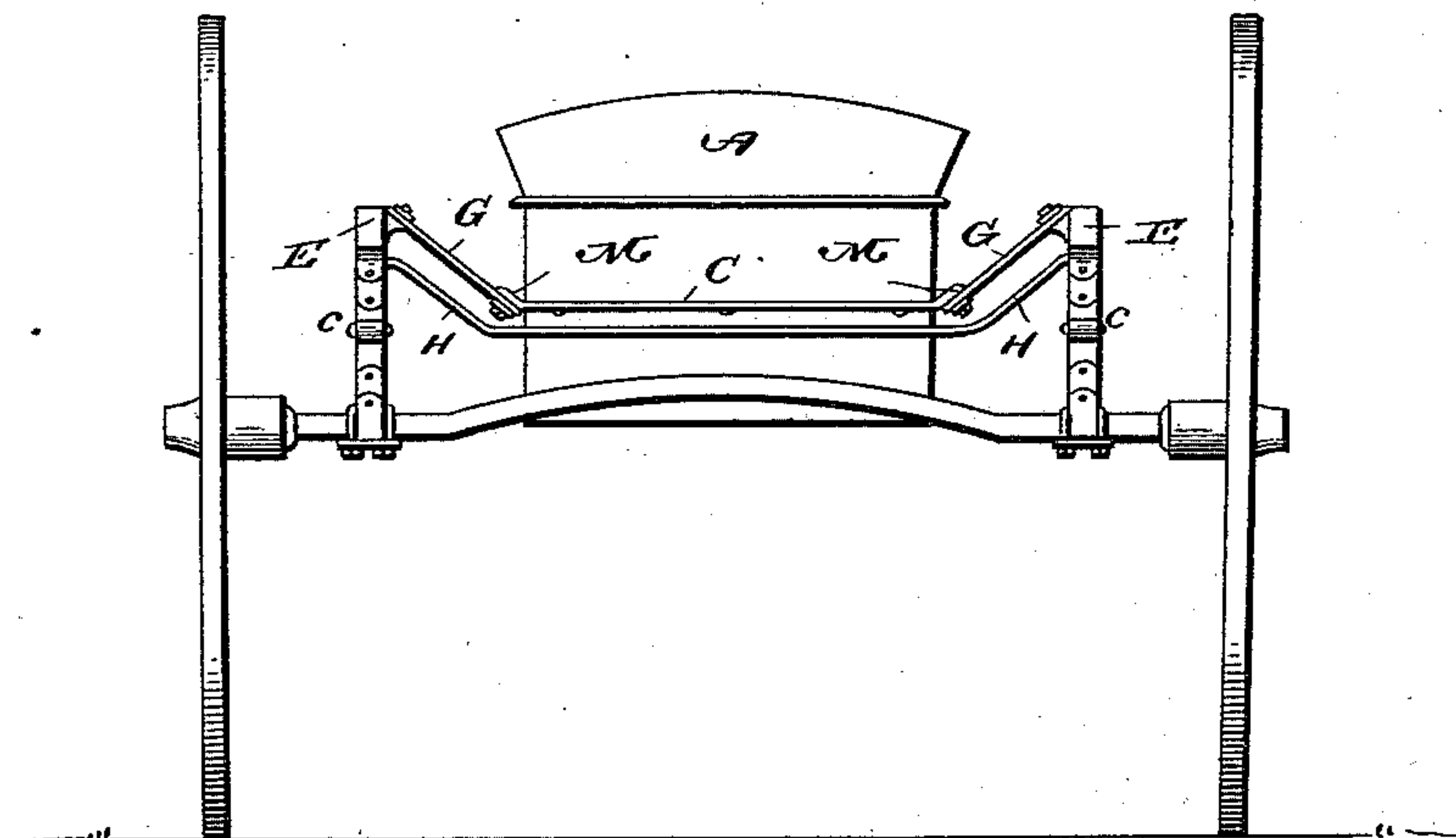


Fig. 2.

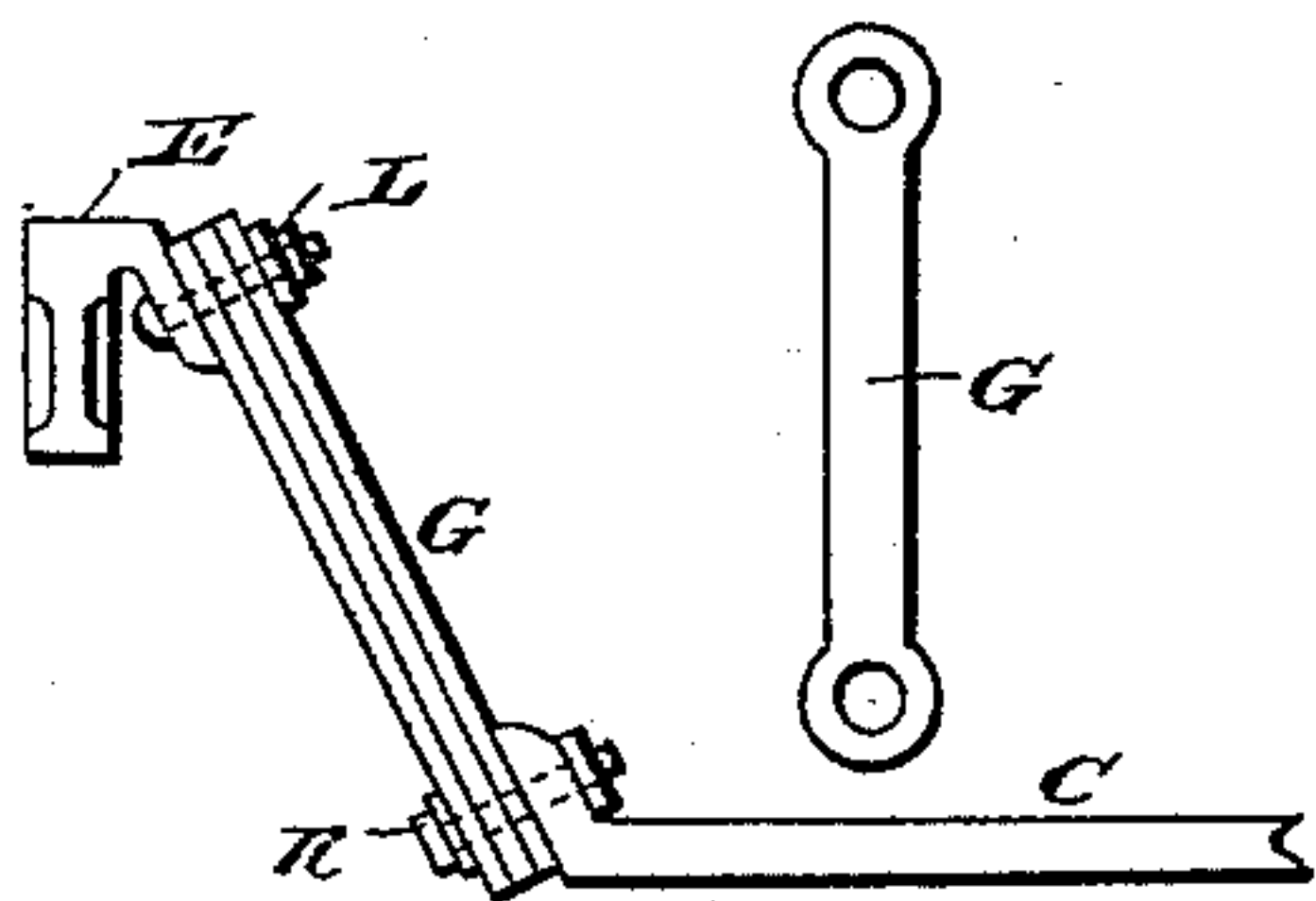
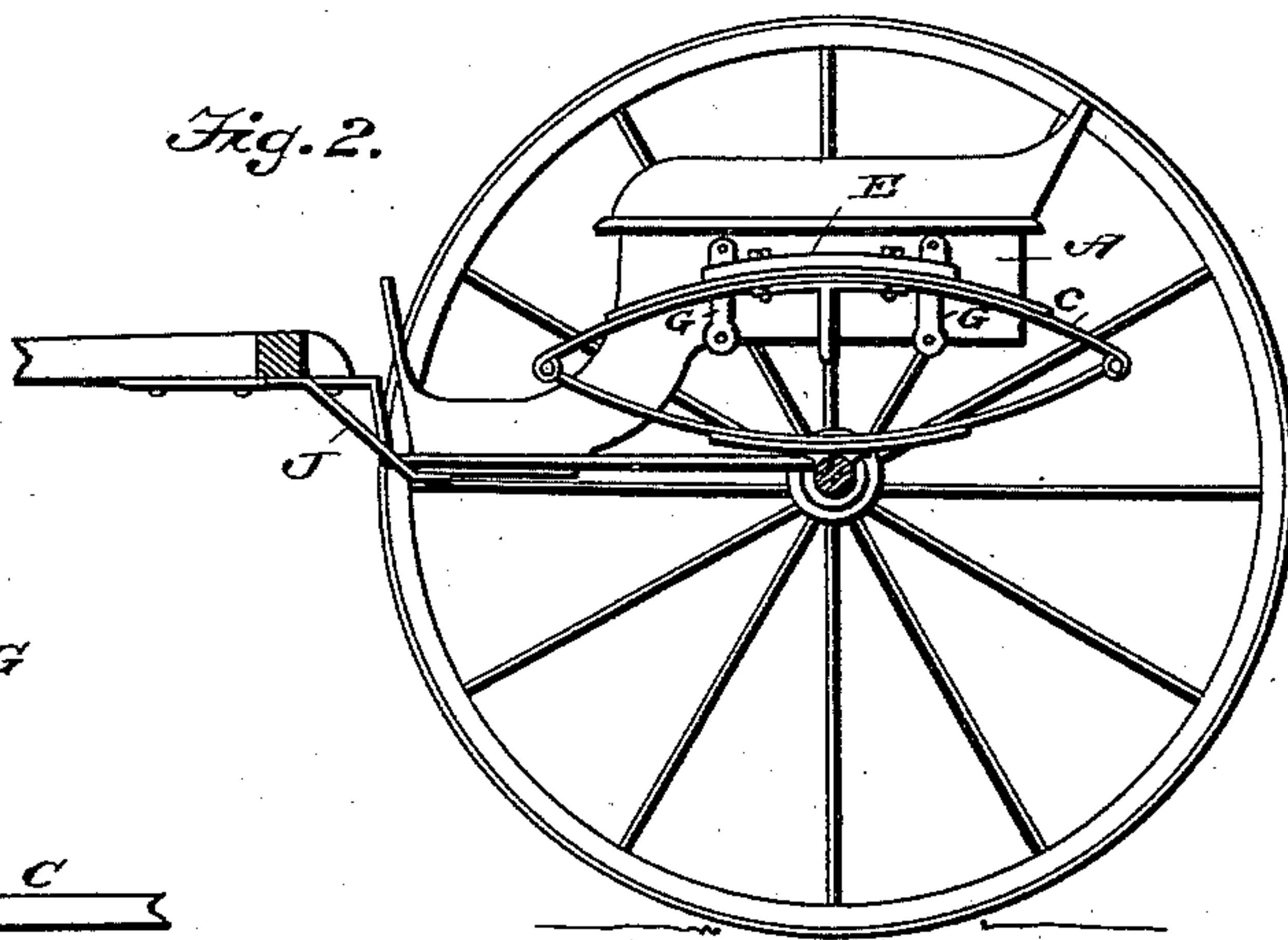


Fig. 3.

Witnesses:

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UNITED STATES PATENT OFFICE.

DAVID LIPPY, OF MANSFIELD, OHIO.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 424,488, dated April 1, 1890.

Application filed January 4, 1890. Serial No. 335,897. (No model.)

To all whom it may concern:

Be it known that I, DAVID LIPPY, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Two-Wheeled 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.

My invention relates to improvements in two-wheeled vehicles; and the objects of my improvements are, first, to provide a device to overcome the horse motion which is common in two-wheeled vehicles; second, to provide a flexible support for the body to overcome the said motion; third, to obviate the necessity of using metallic links or hinges for the purpose stated, and at the same time to provide a means which will be cheap, durable, and efficient. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is an end view of a two-wheeled vehicle embodying all the elements of my invention. Fig. 2 is a side elevation of same, showing the general construction. Fig. 3 is enlarged detached views of the bar C, bracket E, and flexible connections G.

Similar letters refer to similar parts throughout the several views.

In the accompanying drawings, A indicates a vehicle-body, to the under side of which are secured the metallic bars C. The said bars extend across the body. The said bars are formed at their ends to form upwardly-projecting lugs M.

c is elliptic springs, one placed on each side of the body and secured to the axle by any suitable mechanism.

E indicates brackets, which are bolted on the top and in the center of the springs. The said brackets are constructed with upwardly-projecting lugs, one at each end of the bracket, and are beveled on the inner face.

G indicates leather connections, which are four in number. The upper ends of the said connections are secured to the ends of the brackets on their beveled face by bolts or any suitable mechanism. The lower ends are secured to the upwardly-projecting lugs

formed upon the ends of the bars C. The body A is secured to the said bars. The front end of the body is suspended by the flexible straps J. The lower ends of the said straps are attached to the under side of the front portion of the body. The upper ends are secured to the cross-rail of the shafts. It will be readily seen that the body A is suspended by leather connections on the sides as well as the front. The leather connections are constructed of one or more thicknesses of leather and sewed together. They may be flat or rounded in the center, with flat round ends and holes to receive the bolts, as shown in Fig. 3, No. 2.

I know that there are in use links or hinged connections connecting the body to the springs, and I do not claim a pivoted or hinged connection. My leather connections are not pivoted or hinged to the bar or bracket, but they are bolted or otherwise secured rigidly to the bar C and bracket E, the leather connection G allowing all the flexibility of motion required without hinge or pivot. Between the bars C and connections G, I place the spring brace-bar H, the ends of which are clipped or bolted to the under face of the springs c, in this instance the same bolts serving to secure the brackets E and ends of the brace-bar together to the springs.

The invention is so simple in all its parts that it will not be necessary for any further description.

I do not wish to limit myself to leather, for rubber may be used; but leather will be preferable.

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

1. In a two-wheeled vehicle, the combination of the axle, the shafts connected to the axle, the body flexibly connected to the shafts, the springs on the axle, the bars secured to the body, having an upward-extending lug at each end, the brackets secured to the springs, having vertical lugs, and the flexible connections having their lower ends attached to the lugs on the bars and their upper ends connected to the lugs of the brackets.

2. In a two-wheeled vehicle, the combination of the axle, body, and shafts, the flexible con-

- nections between the body and shafts, the springs on the axle, the bars secured to the body and having an inclined lug at each end, the brackets having lugs formed each with an inclined face, the flexible straps having one end connected to the inclined lugs of the bars and the other ends connected to the inclined faces of the lugs on the brackets, and the brace-bar.
- 10 3. In a two-wheeled vehicle, the combination of the body and springs, the bars secured to the body, having an inclined lug at each end, the brackets secured to the springs, having lugs formed each with an inclined face, and the straps or bars having one end connected to the inclined lugs of the bars and the other ends connected to the inclined faces of the lugs on the brackets.
- In testimony whereof I affix my signature in the presence of two witnesses.
- DAVID LIPPY.
- Witnesses:
D. L. SPOTTS,
W. H. LUTZ.