

(No Model.)

M. M. BILLMIRE.

ROAD CART.

No. 343,979.

Patented June 22, 1886.

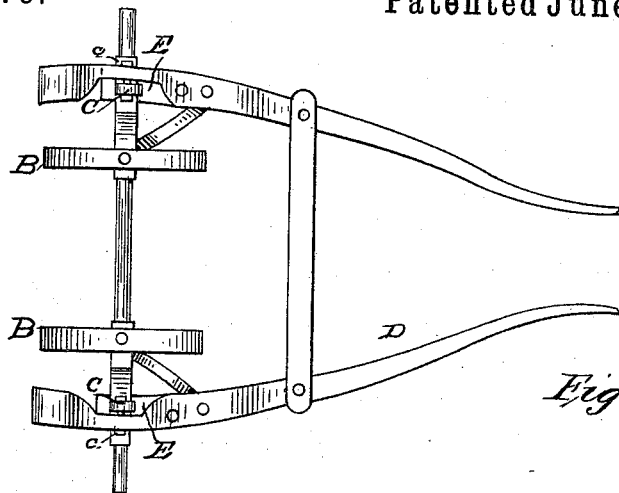


Fig. 1.

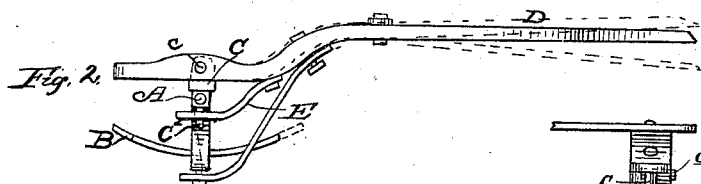


Fig. 2.

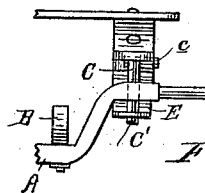


Fig. 5.

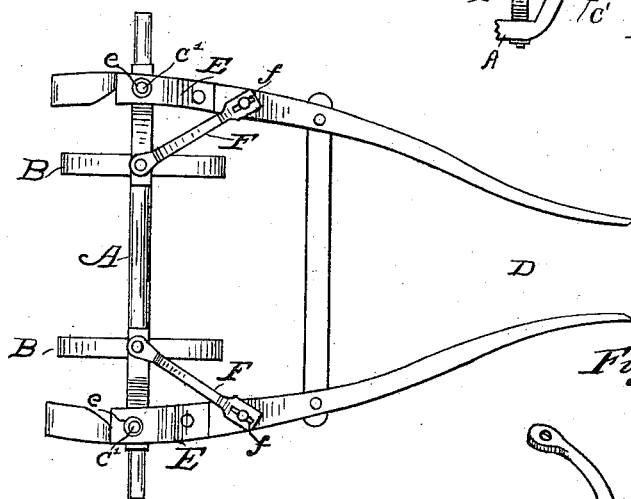


Fig. 3.

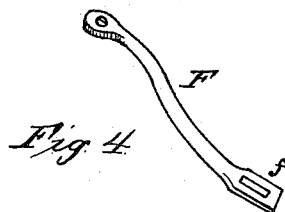


Fig. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

MARTIN M. BILLMIRE, OF ASHTON, ILLINOIS.

ROAD-CART.

SPECIFICATION forming part of Letters Patent No. 343,979, dated June 22, 1886.

Application filed April 16, 1886. Serial No. 199,106. (No model.)

To all whom it may concern:

Be it known that I, MARTIN M. BILLMIRE, a citizen of the United States, residing at Ashton, in the county of Lee and State of Illinois, have invented certain new and useful Improvements in Road Carts; 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 the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to road-carts or sulkies, and aims at obviating the jogging motion commonly experienced by persons riding on such vehicles, and to make the same as easy-riding, or nearly so, as any four-wheeled vehicle.

It consists in the details of construction and novel combinations of parts, more fully hereinafter set forth and claimed, and shown in the accompanying drawings, in which—

Figure 1 is a plan view of the running-gear and shafts embodying my invention. Fig. 2 is a side view. Fig. 3 is a reverse or bottom view. Fig. 4 is a perspective view of a brace-bar. Fig. 5 is a rear view of one end of the axle and its connections on an enlarged scale.

The axle A is of that class commonly called "crank-axle"—that is, having its central portion in a plane different from the axle-arms, which latter are in the same axial line. The body-supports B are secured to the depressed portion of the axle, in order to throw the weight below the axle-arms, and to bring the body closer to the ground. By throwing the weight to one side of and below the axle-arms the body is kept in a nearly-horizontal plane, and the axle is held in a nearly-fixed position. Clips C, located near each end of the axle on the axle-arms, have the shafts D pivotally connected with their upper ends by bolts c. The lower ends of the clips project beyond the axle, forming retaining-points; or they may be provided with bolts C', for the reception of the inner ends of the springs E, which have their forward ends fastened to the shafts. Apertures e in the inner ends of the springs E receive the retaining-points c'. Said ap-

ertures are preferably enlarged to permit the points having a slight play therein. By having the springs located directly below the shafts and the axle come between them and the free ends of the springs the draft is easily distributed and applied to the axle from above and below, thereby avoiding straining the connections between the shafts and axle.

Braces F, interposed between the axle and shafts, have their inner ends connected with the depressed portion of the axle at a distance from the bolts C, from which points they extend laterally in an inclined position to the shafts, to which they are suitably connected by bolts passing through slots f in the outer ends.

In practice, by reason of the pivotal connection between the shafts and the axle, the shafts are free to move up and down, as indicated by dotted lines in Fig. 2, without imparting any movement to the axle, which latter is prevented from turning by reason of the weight being superimposed upon its central depressed portion, and by reason of the springs E and braces F, as is manifest.

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

1. The combination of the centrally-depressed axle, the shafts pivotally connected with the axle near each end, and braces interposed between the depressed portion of the axle and the shafts, and loosely connected at one end with one of the parts, whereby the shaft has a free up and down movement independent of the axle, substantially as set forth.

2. The combination of the axle, shafts pivotally connecting therewith, spring-connections interposed between the axle and shafts to distribute the draft on the top and bottom of the axle, and braces adjustably connecting the axle with the shafts, as and for the purposes set forth.

3. The combination of the centrally-depressed axle, clips located near each end, the shafts pivotally connected with the upper ends of said clips, springs fastened to the shafts at one end, projections on the under side of the axle engaging with the other ends of the

5 springs, and braces extending diagonally from the centrally-depressed portion of the axle and connecting such portion with the shafts, said braces being fixedly connected at one end with one part and adjustably connected at the other end with the other part, substantially as set forth.

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

MARTIN M. BILLMIRE.

Witnesses:

SAMUEL F. MILLS,
E. M. SHELDON.