(No Model.)

F. WIENBERG.

TWO WHEELED VEHICLE.

No. 342,156. Patented May 18, 1886.

Fig. 1

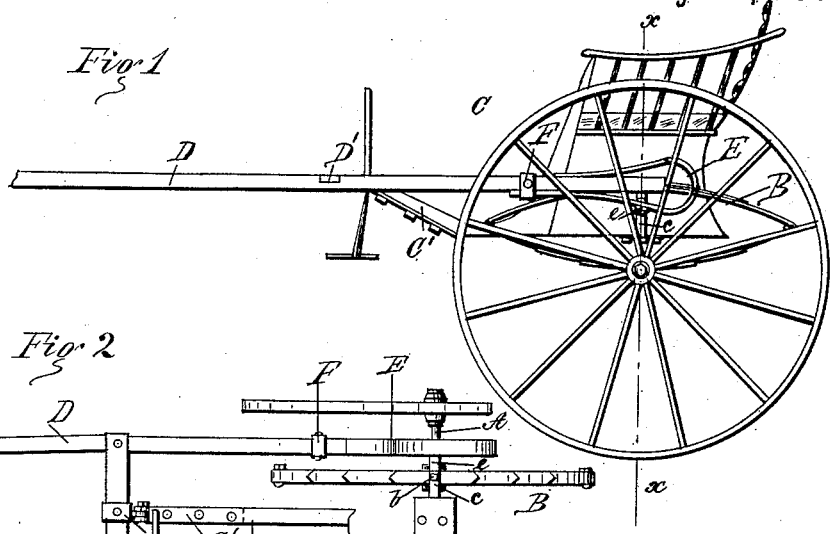


Fig. 2

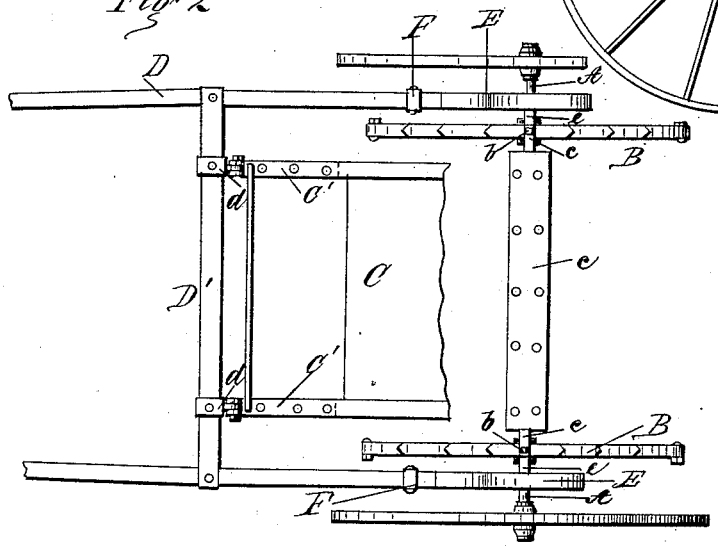


Fig. 3

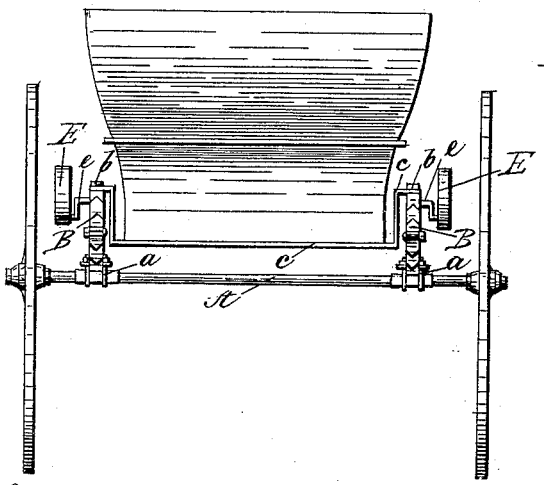
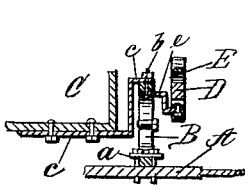


Fig. 4



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UNITED STATES PATENT OFFICE.

FRED WIENBERG, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF TO EDWARD M. BRANNICK, OF SAME PLACE.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 342,156, dated May 18, 1886.

Application filed July 14, 1884. Serial No. 137,711. (No model.)

To all whom it may concern:

Be it known that I, FRED WIENBERG, a citizen of the United States, and residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Two-Wheel Carts, which are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of a two-wheeled cart having my improvements applied thereto. Fig. 2 is a plan view with part of the body broken away. Fig. 3 is a rear elevation, and Fig. 4 is a section, on line *x x* of Fig. 1, showing certain details of construction.

My invention relates to that class of two-wheel carts known as "road-carts," and has for its object to render them easy riding and noiseless; and to that end it consists in certain parts and combinations of parts, which I will now describe, and then point out more specifically in the claims.

In the accompanying drawings, A represents a suitably-constructed axle provided with wheels of any approved form. To this axle are secured, by means of clips *a*, the elliptical springs B, one on each side of the body C, which is secured thereto in any suitable manner, preferably by the means shown, which consists of a cross piece or bar, *c*, extending across and secured to the under side of the body, and having its outer ends bent upward and then outward and secured to the springs B by bolts *b*.

To the forward portion of the body C are hinged the thills D, preferably by means of the clips *d* on the cross-bar D′, connected, as shown, to the front ends of the side pieces, C′, of the body. The rear ends of the thills extend back some distance on each side of the body, and are held between the upper and lower portions of the springs E. These springs E, shaped as shown, are secured to the upper portion of the springs B by means of connecting-pieces *e*. In the construction shown the bolts *b*, which secure the bar *c* to the upper side thereof, also secure the connecting-pieces *e* to the lower side, and this connection is preferred, since it avoids weakening the spring B by making two bolt-holes. The upper portions of the spring E rest upon and thrust against the upper side of the thills and the lower portions against the under side.

In order to prevent lateral displacement of the thills or springs, I attach to the former clips F, into which the forward ends of the lower portions of the latter extend, and in which they have free longitudinal but not lateral play.

By the above construction it will be seen that while the thills are normally held in the usual position in relation to the body by means of the springs E, these springs will permit the thills to vibrate on their hinged connection with the body and prevent the vibrations from being transmitted directly to the body, the springs absorbing the greater portion thereof, thus practically neutralizing the jolting ordinarily caused in this class of vehicles by the motion of the horse. Moreover, the constant thrust of the springs against the thills prevents any rattling.

The attachment of the springs E to the springs B causes them to remain in the same normal position relative to the body and thills whatever position these latter assume by reason of the compression or expansion of the springs B. The same result may be obtained by securing the springs E to the body proper instead of to a part rigidly connected to the body, as shown, the effect being evidently the same in either case.

It is obvious that various changes may be made without departing from the spirit of my invention, and I therefore do not limit myself to the precise details of construction shown and described.

I am aware that heretofore in carts of this description the thills have been hinged to the cart-body and springs employed to bear upon the projecting rear portion of the thills to steady the same, and I do not wish to be understood as claiming such a construction, broadly.

I am also aware of Letters Patent No. 301,516, granted July 8, 1884, to F. L. Perry, and of British Patents No. 7,188 of 1836, and No. 1,120 of 1864, and I do not wish to be understood as claiming anything set forth in said Letters Patent.

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

1. In a two-wheel cart, the combination, with

the body, of the thills hinged thereto and extending rearward, and a single spring secured to each side of the body, one end of the spring extending forward from the point of attachment and bearing upon the under side of the corresponding thill, and the other end being carried up around the end of the thill and then forward and downward, to bear upon the upper side of the same, substantially as and for the purposes specified.

2. In a two-wheel cart, the combination, with the body C, of the thills D, hinged thereto, extending rearward, and provided with clips F, and the springs E, secured to the body and bent around the rear ends of the thills, their free ends being carried forward to bear upon the thills at their upper and under sides, respectively, and the lower ends passing loosely through the clips, substantially as and for the purposes specified.

3. In a two-wheel cart, the combination, with the wheels and axle, of the elliptical springs secured to the latter, the body mounted on the elliptical springs, the thills hinged to the body, and the springs E, secured to the elliptical springs and bearing upon the upper and under sides of the thills, substantially as and for the purposes specified.

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