

(No Model.)

C. W. NOYES.
TWO WHEELED VEHICLE.

No. 344,851.

Patented July 6, 1886.

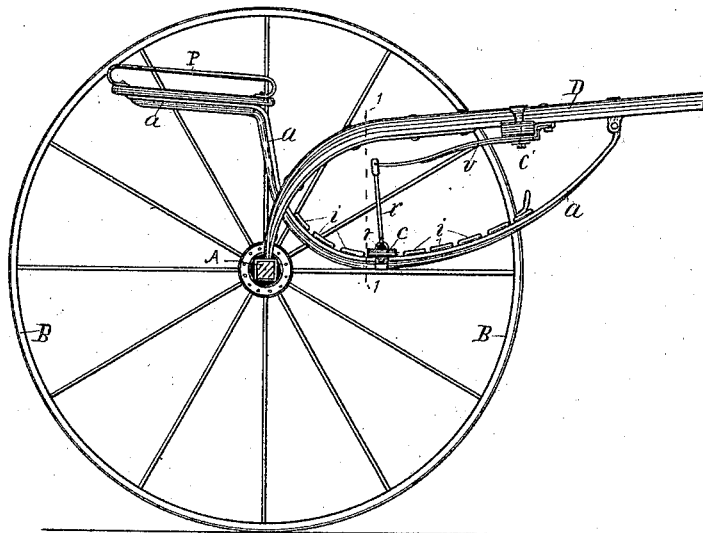


Fig. 1

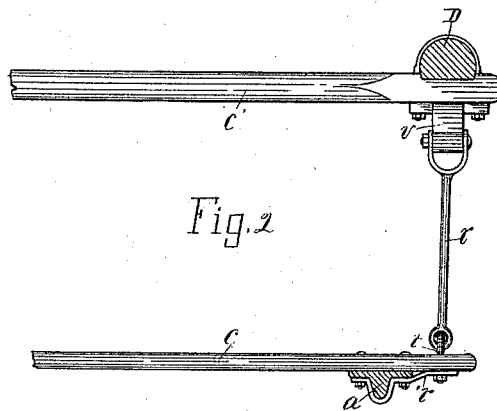


Fig. 2

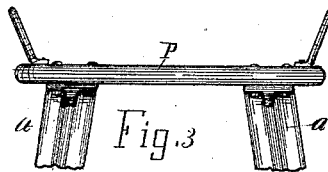


Fig. 3

Witnesses.
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UNITED STATES PATENT OFFICE.

CHARLES W. NOYES, OF KALAMAZOO, MICHIGAN.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No 344,851, dated July 6, 1886.

Application filed April 20, 1886. Serial No. 199,491. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. NOYES, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented a new and useful Two-Wheeled Vehicle, of which the following is a specification.

This invention relates to that class of two-wheeled vehicles, commonly styled "breaking-carts," in which the same bars which support the foot-rest slats also support the seat at their rear elevated end.

The object of the invention is to combine certain improved details with the old elements in this class of vehicles, as hereinafter described and claimed.

In the drawings forming a part of this specification, Figure 1 is a side elevation with one wheel removed; Fig. 2, an enlarged section on dotted line 1 1 in Fig. 1, and Fig. 3 is a rear view of the seat and T-bars in Fig. 1.

Referring to the letters of reference marked on the drawings, D is the thill, A the axle, and B the wheel.

It will be understood that Fig. 1 shows one side of the vehicle, and that the other side is a duplicate of the same.

The T-bars of the body are shown at a. The configuration of these bars is similar to that in prior vehicles of this class. The upper flat surface of the T-bars forms a superior bed for the foot-slats *i i*, secured transversely upon them and bolted at each end to the upper flanges of the T-bars, the same as the seat P is bolted on said bars at the rear elevated end, as in Fig. 3. Very light material may be used in the metal T-bars, owing to their peculiar bowed shape, with the stem of the T forming a truss to the upper flanges. The T-bars are flattened at the forward end, Fig. 1, and in said flattened end an eye is turned for pivotally hanging the body to the thills.

At *v*, I show a spring secured at one end to the cross-bar *c'* or thill D, one on each side of the vehicle, thence extending rearward beneath the thills to a point about central of the body.

The body is suspended from the rear free end of the springs *v* by rods *r*, jointly connected with the end of the spring and with a central cross-bar, *c*, bolted to the T-bars, Fig.

2. Thus when the body springs down the rods *r* will swing backward and forward as heretofore.

In Fig. 2 a brace-clip, *r'*, is shown fitted to the under shape of the T-bar and extended laterally outward beneath the bar *c*. The clip is bolted up through each upper flange of the T-bars and the bar *c*. The outer end of the clip is bolted to the under side of the bar *c* by the bolt *t*, having an eye in the upper end. With this eye the lower end of the rods *r* are connected. This clip locks the T-bars and the cross-bar *c* together in a manner to keep the T-bars from spreading apart and to prevent the T-bars from a tendency to twist over out of a true position in which the stems would be vertical. By the stem of the T is meant its lower vertical flange. A flat spring thus employed in connection with this class of suspending link or rod *r* and body secures, a better spring action with less liability of breaking the spring, because the strain is more equally distributed throughout the length of the spring, instead of exerting most of the strain near the secured end of the spring, as heretofore. The reason is that when the body is borne down the lower end of this style of suspending-rods swings forward; hence, by having the secured end of the spring between the forward fulcrum of the body and the free end of the spring, the latter assumes the form of a bow while under strain to a greater degree than it could if the free end of the spring was between its secured end and the body-fulcrum, as heretofore. Besides, the springs in this position are not in the way of entering the vehicle.

Having thus described my invention, what I claim is—

1. In a vehicle of the class described, the springs, as shown, the T-bars having the central transverse brace secured upon the top flanges of said bars by the clips fitting the under vertical flange thereof, the eyed bolts of the rods which suspend the body from the springs being passed down through the ends of the clips and brace, all combined substantially as set forth.

2. In a vehicle of the class described, the combination of the T-bars, the central transverse brace, the clips bent to fit the vertical

flange of the bars and extending laterally
each way beneath the transverse brace, said
clips being bolted to the upper flanges of the
T-bars and bolted at their outer end to said
5 brace, and the outer ends of the clips forming
a washer for the nuts of the eyed bolts which
connect with the suspending rods, substantially
as set forth.

In testimony of the foregoing I have here-
unto subscribed my name in presence of two 10
witnesses.

CHARLES W. NOYES.

Witnesses:

R. ARTHUR STONE,
J. E. KELLOGG.