(No Model.)

C. W. NOYES.

TWO WHEELED VEHICLE.

No. 343,526. Patented June 8, 1886.

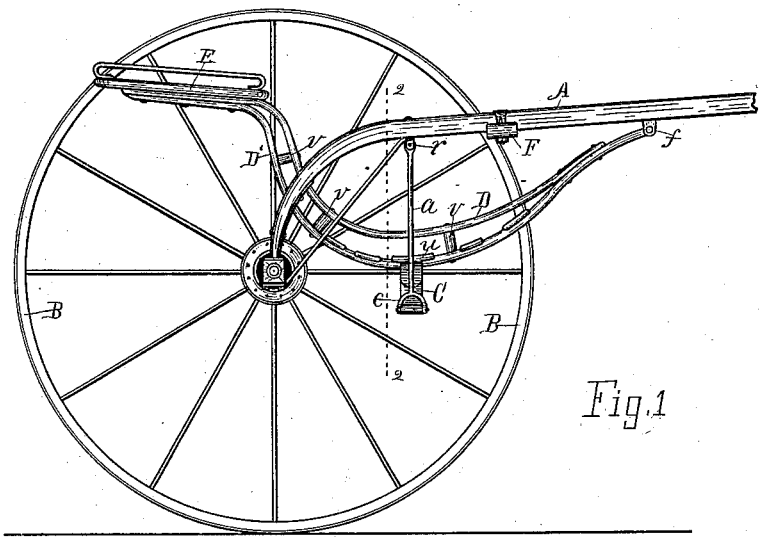

Fig. 1

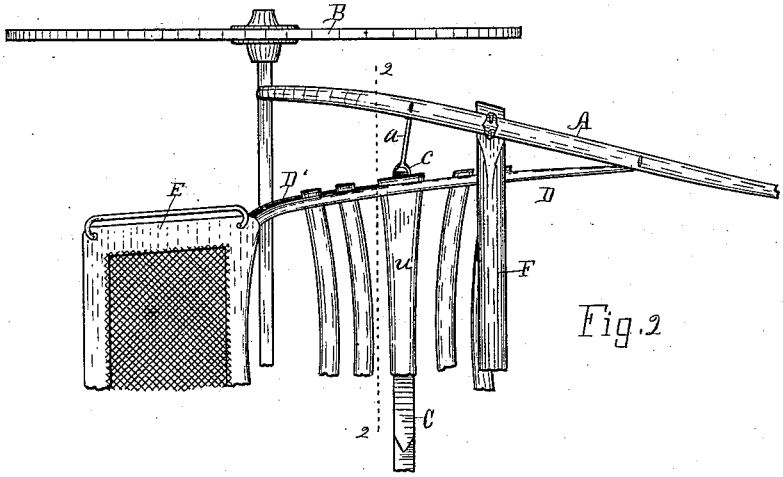

Fig. 2

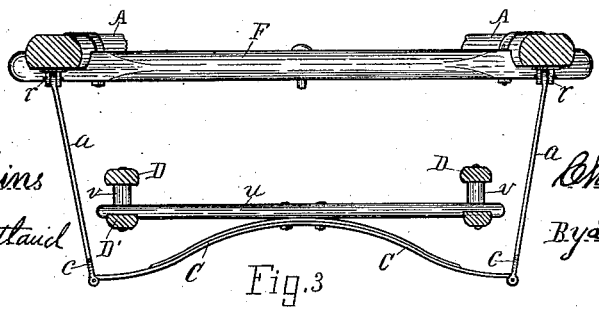

Fig. 3

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. 343,526, dated June 8, 1886.

Application filed March 27, 1886. Serial No. 196,801. (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 in which the bars which support the seat at the rear end support the foot-rest slats. It has for its object certain improvements in the construction of the body below described and claimed.

In the drawings forming a part of this specification, Figure 1 is a side elevation with one wheel removed; Fig. 2, a top view showing approximately one-half of the vehicle; and Fig. 3 is an enlarged section on the dotted lines 2 2 in Figs. 1 and 2, looking from a point at the rear.

Referring to the letters of reference marked on the drawings, A are the thills, connecting with the axle, and F the cross-bar of the thills, as in ordinary vehicles of this class. In a suspended body of this class lightness of material of which the bars of the body are composed is desirable, and also great strength. I effect this by using a bar, D, of like curvature to the main bar D′ forward of the seat E, the bar D being separated from and a little above the bar D′ throughout the curved bulge of the body. The separated portion of the bars thus run parallel with each other. A series of studs or shouldered bolts are rigidly secured at each end to the bars D D′, as shown at *v*. Thus the separated curve of the bars cannot spring apart or come closer together by the great strain on the curve, and the upper bar acts as a truss to the lower bar at the curve on the ordinary principle of a truss.

The object of curving the bars alike and running them parallel and near each other is to preserve the same curve to the body there would be if only a single bar were employed, and thus give to them the effect, as to strength and use, of a single bar. An important advantage in preserving this curvature of the body is, that there is nothing at the side of the body to prevent ready entrance into the vehicle, besides, by being locked together at various points throughout the curve, the body is stronger.

In prior constructions, in which the straight seat-bars and the curved foot-rest bars below are rigidly connected at each end, the body has a bungling appearance, the curve of the lower bar weak, and the seat-bars are always in the way.

Cross-slats are secured at each end to the lower bar, D′, as shown in the drawings. Of course, it will be understood that both sides of the vehicle are alike, the same as the one side illustrated in Fig. 2. The section in Fig. 3 shows both sides. The forward end of each trussed side of the body is pivotally connected with the thills at *f*, forward of the cross-bar F, as in prior constructions. These trussed sides may be wood or metal, preferably the former.

The spring C, which we have here shown, is suspended from the thills by rods *a*, pivoted at *r* so as to swing forward and backward. The lower ends of said rods *a* are attached to the ends of the spring C by pivots at *c*, said pivots being at right angles to the pivots at *r*, to allow the spring to lengthen and shorten, during which action the rods move a little laterally. The center of the spring is secured to the slat *u* of the body, approximately at the center of the body. Thus the trussed body is suspended from the thills over and free from the axle by the spring C and rods *a;* but any suitable spring may be employed to support the body.

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

In a two-wheeled vehicle having a suspended body which supports the seat and foot slats, the body having the bowed portion of its sides composed of two bars similarly curved, separated a little one above the other, running parallel with each other, and rigidly held in this relative position by the series of transverse bolts, substantially as set forth.

In testimony of the foregoing I have hereunto subscribed my name in presence of two witnesses.

CHARLES W. NOYES.

Witnesses:
CHAS. V. CHASE,
E. C. SOUTHARD.