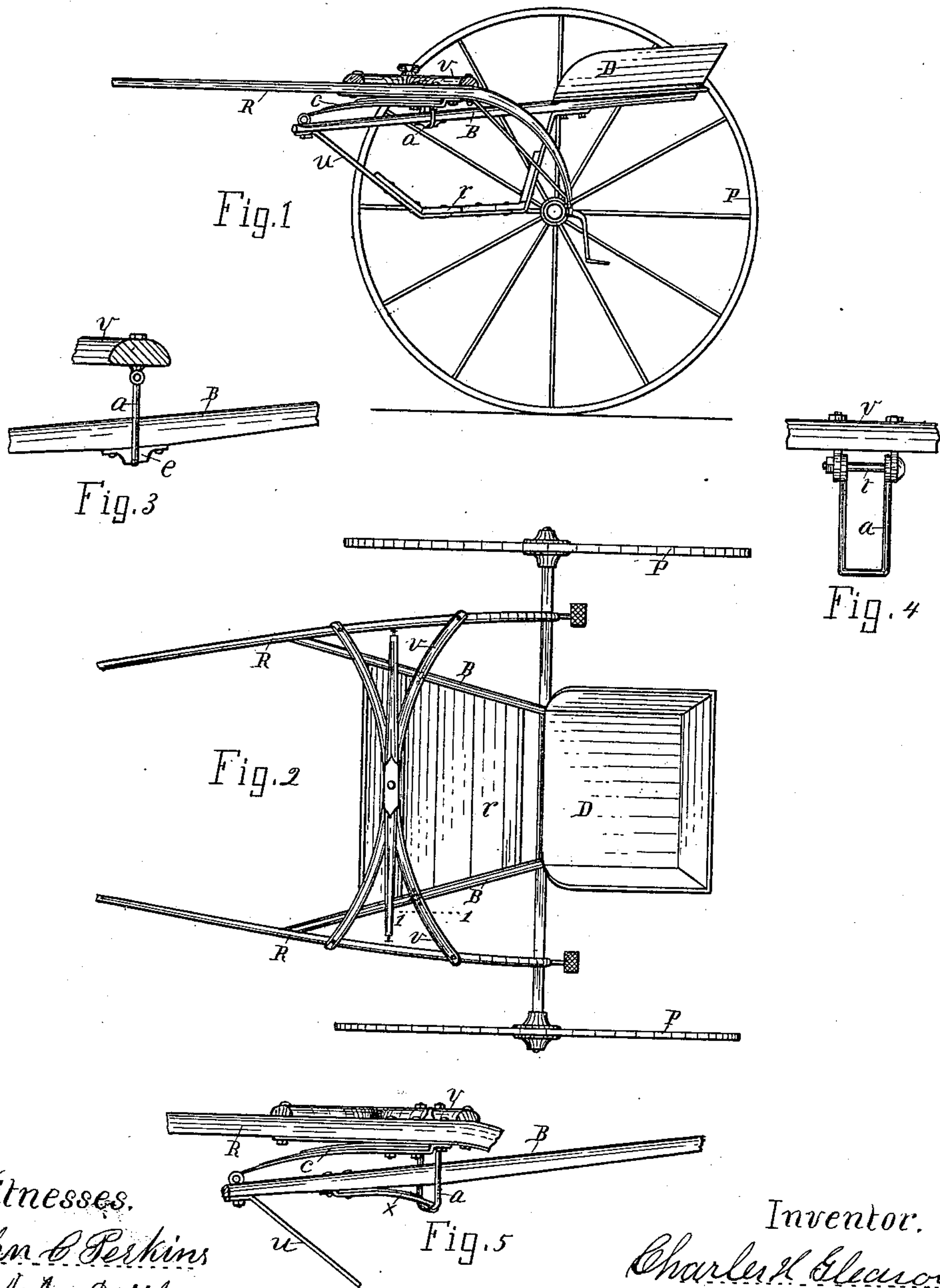


(No Model.)

C. H. GLEASON.  
TWO WHEELED VEHICLE.

No. 335,350.

Patented Feb. 2, 1886.



Witnesses.

John C. Perkins  
Ralph Sittler

Inventor.

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# UNITED STATES PATENT OFFICE.

CHARLES H. GLEASON, OF KALAMAZOO, MICHIGAN.

## TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 335,350, dated February 2, 1886.

Application filed October 24, 1885. Serial No. 180,795. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES H. GLEASON, a citizen of the United States, residing at Kalamazoo, county of Kalamazoo, State of Michigan, have invented a new and useful Cart for Horse-Training, of which the following is a specification.

The object of this invention consists in certain improvements to effect desirable results in the use of this class of vehicles, and to simplify and cheapen the construction.

An important result attained in this invention consists in centrally fulcruming the rigid bars which bear the seat by means of hinged bails, and in providing springs on each side, secured to the thill at one end and pivotally connected to the end of the seat-bars at the other end, so that when the seat-bars rock in the bails under the weight of the rider said bars will move endwise to conform to the lengthening of the springs, which springs have an unlimited yielding capacity, and individually support the forward end of each seat-bar.

In the drawings, forming a part of this specification, Figure 1 is a side elevation with one wheel removed; Fig. 2, a top view; Fig. 3, an enlarged detail of parts B *a e* in Fig. 1; Fig. 4, parts in Fig. 3, looking from a point at the left hand; and Fig. 5 is an enlarged view of parts in Fig. 1, with an additional feature, all below described in detail.

Referring to the reference-letters marked on the drawings, B B are the seat-bars, converging toward their rear end, where they bear the seat D, which is secured to them. A flat bar-spring, C, is secured to the thills on each side, and the forward end of each seat-bar is pivotally connected with the free end of the springs C C.

At a point substantially central between the forward end of the seat-bars and the seat D said seat-bars are fulcrumed in bails *a*, a casting, *e*, having a groove to fit over the lower bar of the bail, being secured to the under side of the bars B. Thus the bars rock or teter on this bail-fulcrum. The bails *a a* are

hinge-connected to the cross-bar of the thills, so as to swing backward and forward in accordance with the lengthening and shortening of the springs C during their spring action, Figs. 1, 3, 4. The body, consisting of two bent bars, U, provided with floor *r*, and secured to the seat-bars B, swings with the seat-bars and seat when the vehicle is in motion, and thus they always preserve the same position to each other as they have when the vehicle is at rest.

In Fig. 5 an additional spring, *x*, is shown, which may be employed to assist in cushioning the seat. This spring *x* is secured at one end to the seat-bar, and the free end of the spring is hinged to the lower bar of the bail *a*. This sustains the bars B above said lower bar of the bails. By the use of the springs *x* less effect of the motion of the horse is experienced by the rider.

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

1. In a two-wheeled vehicle, the combination of the thills, the seat-supporting bars, bails hinged to the thills and forming a swinging fulcrum to the seat-bars, and the springs—one on each side—secured to the thills and having their free ends pivotally connected with the forward ends of the seat-bars, substantially as set forth.

2. The combination of the seat-bars, springs secured to the thills, the forward end thereof being pivotally connected with the end of the seat-bars, and springs connecting the under side of the seat-bars, and bails hinged to the thill-bar, the lower bar of said bails connecting with the latter-named springs, substantially as set forth.

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

CHARLES H. GLEASON.

Witnesses:

SAMUEL FOLZ,

JOSEPH A. FRANKLIN.