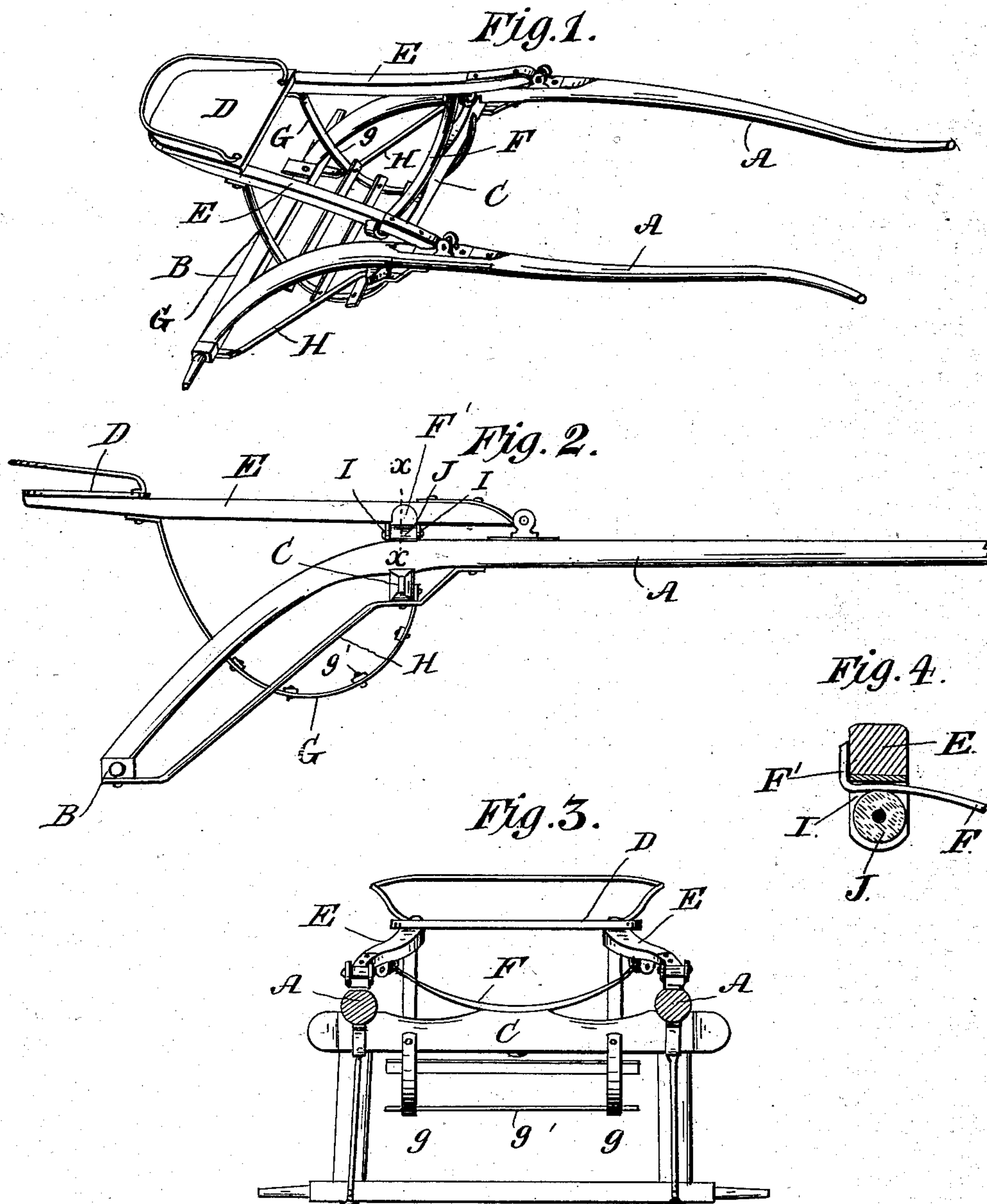


(No Model.)

T. O'BRIEN.  
TWO WHEELED VEHICLE.

No. 317,179.

Patented May 5, 1885.



Witnesses  
*Samuel R. Turner*  
*P. B. Turpin.*

Inventor  
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*Attys*



# UNITED STATES PATENT OFFICE.

THOMAS O'BRIEN, OF COLDWATER, MICHIGAN, ASSIGNOR OF ONE-HALF TO  
WILLIAM H. SCHMEDLEN, OF SAME PLACE.

## TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 317,179, dated May 5, 1885.

Application filed February 28, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS O'BRIEN, a citizen of the United States, residing at Coldwater, in the county of Branch and State of Michigan, 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.

This invention is an improvement in two-wheeled carts, and aims to so combine and arrange the several parts, constructed as will be specified, as to provide a strong, easy-riding, and compact cart.

The invention consists in certain novel constructions and combinations, which will be hereinafter first fully described, and then pointed out in the claims.

In the drawings, Figure 1 is a perspective view, Fig. 2 a side view, and Fig. 3 a front view, the shafts being broken in section, of a cart constructed according to my invention, the wheels being removed; and Fig. 4 is a detached section on about line *xx*, Fig. 2.

The shafts *A A* curve down at their rear ends and are secured to the axle *B*. The shaft-bar *C* connects the shafts *A* about the point where the whiffletree is supported. I support the seat *D* on arms *E E*, the forward ends of which are pivoted on top of the shafts *A* at a point in advance of the bar *C*. By pivoting these bars on top of the shafts I leave the full width between the shafts for horse-room. A bar-spring, *F*, is secured centrally on the shaft-bar *C*, and its ends extend outward under the seat-bars, and are secured to the seat-bar, in the manner hereinafter more fully described. The foot-rest or crib *G* is formed of spring-bars *g* and cross bars or slats *g'*. The forward ends of the spring-bars *g* are secured rigidly to the shaft-bar *F*, and their rear ends are fixed rigidly to the seat-bars *E* at points under or near to the seat *D*. These bars *g*, being of spring metal, serve as supplemental springs, by which to support the seat and aid

the spring *F* in supporting said seat, and permitting the same to yield properly to give comfort to the rider.

It will be noticed that I support the two springs *G* and *F* both on the shaft-bar, and thus avoid all additional bars, which are by this arrangement rendered unnecessary, thus increasing the simplicity of the cart and enabling its production at a small cost, as will be manifest.

In order to give rigidity to the curved portions of the shaft, I provide brace-bars *H*, secured at their forward ends to the shafts in advance of the shaft-bars, extended under and secured to the said shaft-bars, and thence carried to the rear and secured to the axle. These bars *H* form sufficient braces by which to strengthen the shafts, as will be seen.

The manner of connecting the spring *F* with the seat-bars *E* is most clearly shown in Fig. 4. To the described end I provide the seat-bars with parallel lugs *I I*, which depend in line with the shaft-bar. Between the lower ends of these lugs *I* I secure an elastic block, *J*, usually of rubber. The spring *F* has its ends carried between the elastic blocks and the under side of the seat-bar, and bent to provide the right-angled lugs *F'*, which project up alongside of the seat-bars and rest close to the said bars when the parts are in their normal condition and the spring *F* is not expanded. While I prefer to extend these lugs upwardly alongside of the seat-bars, they might be turned down alongside the elastic block without departing from the invention. I usually and preferably form these blocks circular in cross-section and journal them in their lugs, so they will freely revolve when the ends of the spring move outward in its expansion.

In operation, depression of the seat *D* will expand the spring *F* and cause its ends to move outwardly under and beyond the seat-bar. The elastic blocks permit this movement of the spring, and at the same time hold such spring at all times firmly against the seat-bars, and prevent rattling and other disagreeable noises incident to a loose joint.

The ears *F'*, which, as stated, rest normally against the outer sides of the seat-bars, serve



by engagement with said bars to prevent the seat from being thrown forcibly upward by ruts or other roughnesses in the road.

My cart is simple in its construction, will be found easy to the rider, and may be manufactured at slight cost.

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

10 1. The combination, in a two-wheeled cart, of the shaft, the shaft-bar, the seat-bars having their forward ends pivoted on top the shafts in advance of the shaft-bar, a bar spring secured midway its ends on the shaft-bar and  
15 extended under the seat-bars, and the crib having opening spring-bars secured at their forward ends to the shaft-bar and their rear ends to the seat-bars, substantially as set forth.

2. The combination, with the seat-bar hav-

ing depending lugs and an elastic block secured between the lower ends of said lugs, of the spring having its end inserted through between the said elastic block and the seat-bar, substantially as set forth.

3. The combination of the seat-bars, the lugs depending from said bars, the elastic block secured between the lower end of said lugs, and the spring having its ends inserted between the elastic block and the seat-bar, and provided on its outer ends with right-angled ears, substantially as set forth.

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

THOMAS O'BRIEN.

Witnesses:

C. N. LEGG,

F. D. NEWBURY.