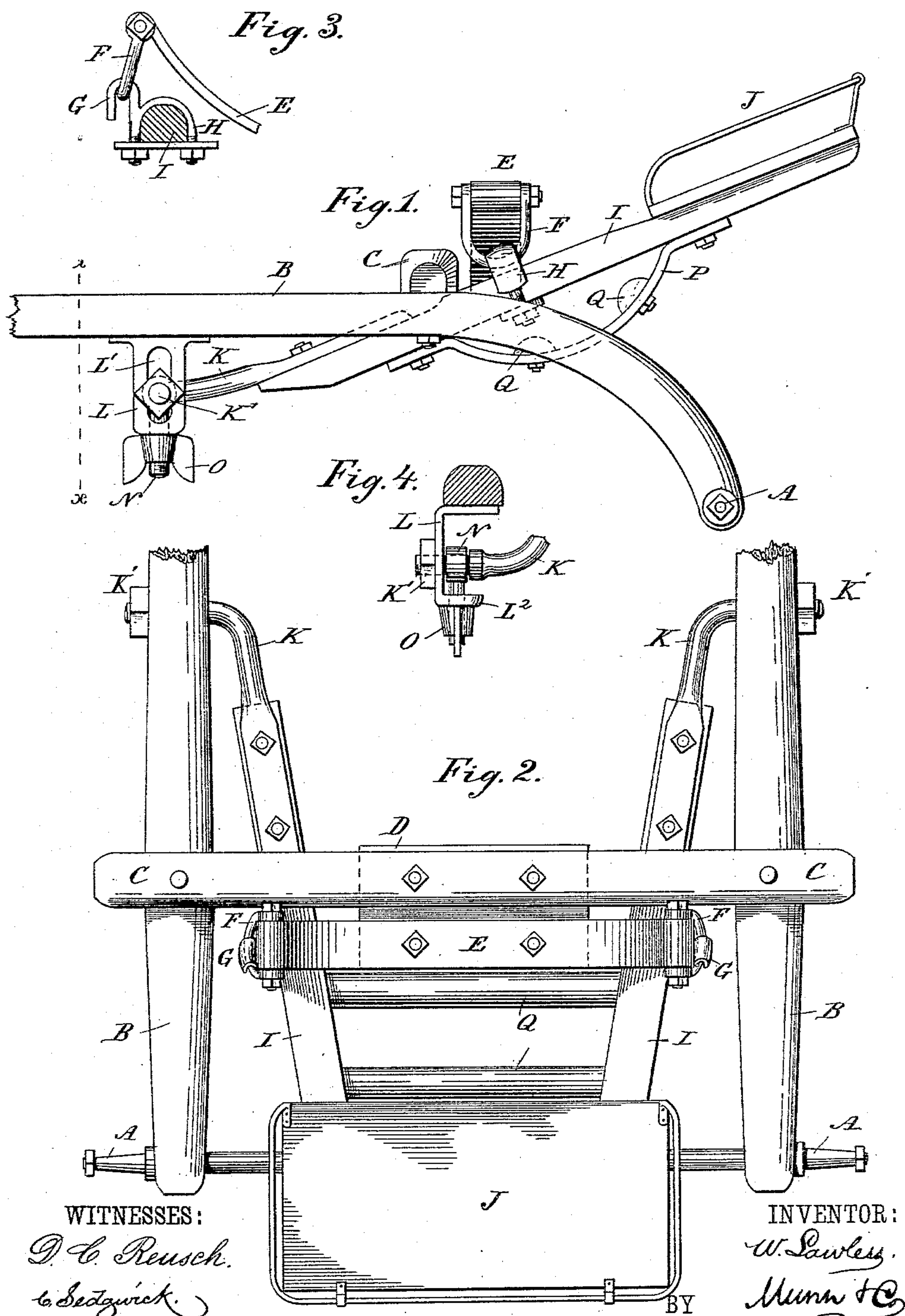


(No Model.)

W. LAWLESS.  
TWO WHEELED VEHICLE.

No. 381,705.

Patented Apr. 24, 1888.



WITNESSES:  
*D. C. Reusch.*  
*to Sedgwick.*

INVENTOR:  
*W. Lawless.*  
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ATTORNEYS.



# UNITED STATES PATENT OFFICE.

WILLIAM LAWLESS, OF OTTAWA, ILLINOIS.

## TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 381,705, dated April 24, 1888.

Application filed September 8, 1887. Serial No. 249,102. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM LAWLESS, of Ottawa, in the county of La Salle and State of Illinois, have invented a new and Improved Two-Wheeled Vehicle, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved two-wheeled vehicle in which the seat can be conveniently adjusted to suit the driver.

The invention consists of shaft-bars carrying a cross-beam on which is held a spring supporting the outer ends of the seat-bars, which are pivoted at their inner ends on the shaft-bars.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement. Fig. 2 is a plan view of the same. Fig. 3 is an end elevation of the spring-clip, and Fig. 4 is a sectional end elevation of the seat-bars on the line *x x* of Fig. 1.

The axle A carries the wheels (not shown in the drawings) in the usual manner, and the inner ends of the shaft-bars B are secured in any suitable manner to said axle A. A cross-beam, C, connects the two shaft-bars with each other a suitable distance in front of the axle A, and on the under side of said cross-beam C is secured a plate, D, which projects rearwardly, and on which is fastened in its middle the spring E, extending upward at its outer ends, on which are pivotally hung the clips F, adapted to engage hooks G, formed on the clips H, secured to the seat-bars I, carrying at their rear ends the seat J, which is of suitable shape and size. The spring E holds the seat-bars against the under side of the cross-bar when the seat is not occupied, and the said cross-bar serves as a stop to limit the upward movement of the seat-bars, thereby preventing the liability of the occupant of the seat from being thrown out in passing over rough and uneven surfaces.

The seat-bars I are held in an inclined po-

sition, and are each provided at their front ends with a pivot, K, passing through a vertical slot, L', formed in the bearing L, secured to the under side of each shaft-bar B. On the outer threaded end of each pivot K a nut, K', screws against said bearing L, so as to prevent the pivot K from passing out of the slot L'. Each pivot K is fulcrumed in an eyebolt, N, which extends downward and passes through an annular projection, L<sup>2</sup>, formed on the lower end of the bearing L and extending inward. On the lower threaded end of the eyebolt N a nut, O, screws against the under side of the projection L<sup>2</sup>, so as to hold the pivot K in any desired position on the bearing L.

On the under side of each seat-bar I is secured a curved bar, P, and the two curved bars P are connected with each other by the foot-rests Q, preferably made semicircular in cross-section, as illustrated in Figs. 1 and 2, and serving as a rest for the feet of the driver occupying the seat J.

It will be seen that the spring E forms a fulcrum for the seat-bars I, so that the seat-bars and the seat J can be adjusted in any desired position by adjusting the respective nuts O and K' on the bolt N and the pivot K, whereby the latter is raised or lowered in the slot L' of the bearing L, thus elevating or depressing the seat J. It will further be seen that the spring E, supporting the seat-bars I easily and freely, insures easy riding for the driver in the seat J.

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

1. In a two-wheeled vehicle, the combination, with the shaft-bars and a cross-bar connecting the same, of a spring carried by the said cross bar and having upwardly-projecting ends, and seat-bars pivoted to the under side of the shaft-bars, projecting rearwardly under the cross-bar, and pivotally hung from the ends of the spring, whereby the upward movement of the seat-bars will be limited by the cross-bar, substantially as described.

2. In a two-wheeled vehicle, the combination, with the shaft-bars and a cross-bar connecting the same, of a spring carried by said cross-bar and having upwardly-projecting ends, seat-bars adjustably and pivotally connected to the shaft-bars, and clips pivoted to

the spring and engaging hooks on the shaft-bars, substantially as herein shown and described.

3. In a two-wheeled vehicle, the combination, with the shaft-bars, of a slotted bearing secured to each shaft-bar, seat-bars, each having a pivot on its end held in said slotted bearing, and an eyebolt held on the said pivot and bearing for adjusting the said seat-bars, substantially as shown and described.

4. In a two-wheeled vehicle, the shaft-bars carrying a cross-beam and a spring held on

said cross-beam, in combination with seat-bars supported by said spring, a pivot formed at the end of each seat-bar, a slotted bearing secured to each shaft-bar and carrying the pivot ends of the seat-bars, and an eyebolt held on each pivot and passing through the said bearing, substantially as shown and described.

WILLIAM LAWLESS.

Witnesses:

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