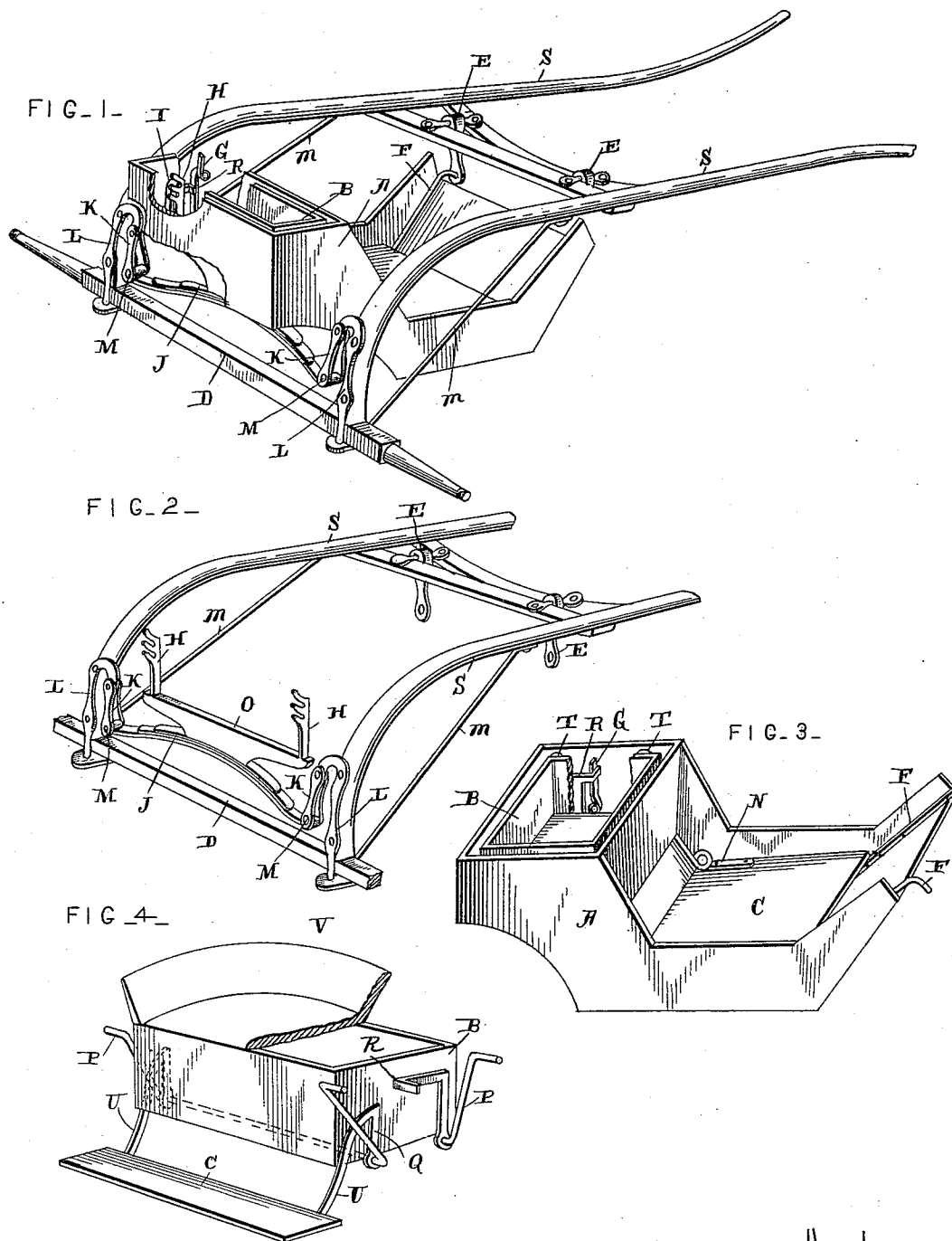


(No Model.)

T. McINTOSH.
TWO WHEELED VEHICLE.

No. 459,967.

Patented Sept. 22, 1891.



WITNESSES-

Geo. C. French.

J. M. Nesbit.

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UNITED STATES PATENT OFFICE.

THEODORE MCINTOSH, OF BROWNSVILLE, INDIANA, ASSIGNOR OF ONE-HALF TO HARRY A. MCINTOSH, OF SAME PLACE.

TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 459,967, dated September 22, 1891.

Application filed May 2, 1891. Serial No. 391,440. (No model.)

To all whom it may concern:

Be it known that I, THEODORE MCINTOSH, of Brownsville, in the county of Union and State of Indiana, have invented certain new and useful Improvements in Two-Wheeled Vehicles; and I do hereby 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.

My invention relates to an improvement in two-wheeled vehicles. The object is to construct a substantial and economical two-wheeled vehicle. A further object is to provide means to prevent the jostling motion of the cart or two-wheeled vehicle from being transferred to the seat.

With these ends in view my invention consists in certain features of construction and combination of parts, as will be hereinafter fully described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in perspective of my improved cart without the seat and wheels. Fig. 2 shows the combination of the spring, hangers, and clips. Fig. 2 also shows the combination of the spring, spring-bar, and a pair of vertical supports to support the body. Fig. 2 also shows a pair of hangers to support the front part of the body. Fig. 3 shows the manner in which the foot-rest is connected to the body by springs and also the manner in which the seat-support is pivotally connected to the body. Fig. 4 shows the oscillating bars on which the seat-supports rest, said oscillating bars being pivotally connected to the ends of the seat-support. Fig. 4 also shows stops rigidly secured to the seat-supports that rest against springs secured to the body to support the seat when the cart is going uphill.

Referring to Fig. 1, E are hangers pivotally connected to supports rigidly secured to cross-bars, the ends of said cross-bars being rigidly secured to the shafts S. Said hangers are also pivotally connected to bars or supports rigidly connected to the front part of the body, the pivotal connections being shown by letter F. The hangers K are pivotally connected to the clips L, and said hangers K are also pivotally connected to the spring J, said pivotal connection being shown by the letter M. The clips L, that support the upper ends of the

hangers K, are rigidly secured to the rear ends of the shafts S and also to the axle. The clips L, which are rigidly secured to the shafts and axle, and which support the upper ends of the hangers K, are formed integral. The spring-bar O is rigidly secured to the spring J, and the lower ends of the body-supports H are rigidly secured to the spring-bar O, and the upper parts of said body-supports H are each formed with a series of bearings for the reception of the pivots rigidly secured to the sides of the body. By this means the body may be raised or lowered to adapt it to large or small horses or to persons of heavy or light weight.

The seat-support B rests upon a pair of oscillating bars. The bars extend horizontally from one end of the seat-support B to the other. Said bars are then bent and extend vertically to or nearly to the upper face of the seat-support B, and the ends P are then bent at right angles to the vertical portions of the bars, and the ends P are pivotally connected to the sides of the body, and the oscillating bars are pivotally connected to the supports Q, rigidly secured to the ends of the seat-support B, whereby but little of the jostling motion of the cart will be imparted to the seat-support B or seat or the occupant of the cart. The stops R are rigidly secured to the ends of the seat-support B, one stop to each end. A pair of springs G are rigidly secured to the sides of the body, one spring to each side. The stops R will rest against the springs G in going up hill, whereby the seat will be held in its proper position relative to the body.

Referring to Fig. 3, the body A and foot-support C are connected together by the springs N. By this means but little of the jostling motion of the cart will be transferred to the feet or lower limbs of the occupant of the cart. The foot-support C may be connected to the body A by one spring, if so desired, instead of by a pair of springs, as herein shown.

When either wheel of the cart passes over a depression in the road, the body of the cart will swing toward the wheel that drops into the depression, thereby relieving the occupant of the cart from a sudden jar.

The body of the cart is connected to the

running-gears in such a manner whereby it cannot move horizontally backward or forward.

5 If so desired, the springs G may be secured to the ends of the seat-support B, and the stops R may be secured to the sides of the body A.

Slight changes in the construction and combination of parts may be made without departing from the spirit and scope of my invention. If so desired, the seat-support B and the foot-rest C may be rigidly connected together by bars, as shown in Fig. 4, and the springs omitted. In Fig. 4 I also show a section of a seat V, secured to the seat-support B.

15 What I claim as new and useful, and desire to secure by Letters Patent, is—

1. In a two-wheeled vehicle, the spring J, vertical standards H, having inclined notches supported on said spring, the body pivoted at its forward end to the frame of the vehicle, and the studs extending outward from the rear portion of the body which engage

the notched standards, the parts being combined to operate substantially as shown and described. 25

2. In a two-wheeled vehicle, the frame, the body supported therein, the seat supported on hangers within the body, stops secured to the seat, and springs secured within the body, which are engaged by the said stops, whereby the movement of the seat is limited, the parts being combined to operate substantially as shown and described. 30

3. In a two-wheeled vehicle, the frame, the body supported therein, a seat supported on hangers within the body, a foot-rest rigidly connected to the seat, and springs N, which connect the said foot portion and the body of the vehicle, the parts being combined to operate substantially as shown and described. 35 40

THEODORE MCINTOSH.

Witnesses:

JOHN S. RITER,
W. R. HALL.