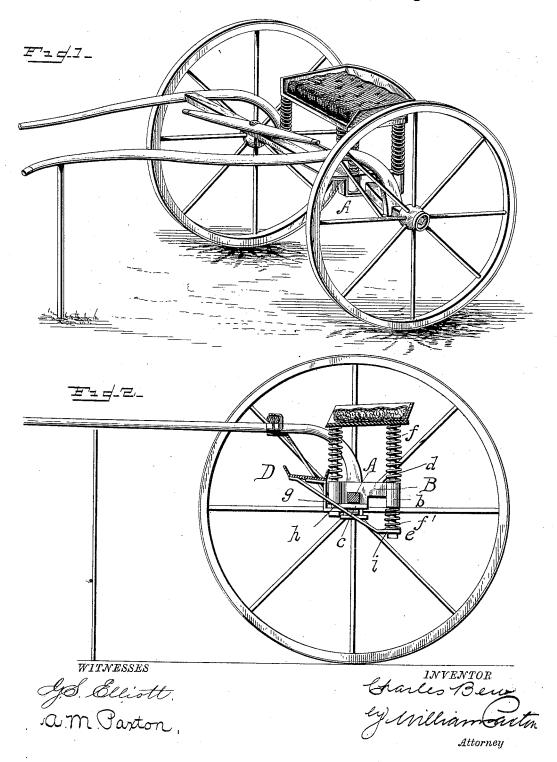
C. BEW.

## TWO WHEELED VEHICLE.

No. 348,448.

Patented Aug. 31, 1886.



## UNITED STATES PATENT OFFICE.

CHARLES BEW, OF ANGOLA, INDIANA.

## . TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 348,448, dated August 31, 1886.

Application filed June 28, 1886. Serial No. 206,431. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BEW, a citizen of the United States, residing at Angola, in the county of Steuben, State of Indiana, have invented certain new and useful Improvements in Vehicles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to spring seats for to sulkies and other vehicles; and it consists in the improvements hereinafter described and

set forth.

In the accompanying drawings, forming part of this invention, Figure 1 is a perspec-15 tive view of a sulky embodying my improvements, and Fig. 2 is a side view of the seat

and supporting-frame.

A refers to the axle, upon the ends of which are mounted carrying-wheels, as ordinarily. 20 Upon the said axle is rigidly mounted two parallel castings, B B, each of which consists of a recessed central portion, in which bears the axle. Each casting is provided at its front and rear with a cylindrical portion, b, 25 which is vertically perforated. A tie-plate, c, is located beneath the axle, and is bolted to the central portion of said casting to retain the latter in proper position.

Through each cylindrical portion b is a rod, 30 d, the upper end of which is connected to one of the corners of the seat, while the lower portion of said rod depends below the cylindrical portion b and carries at its end a nut, e. The rear rods d are embraced by coiled springs 35 f f', the spring f being interposed between the seat and the upper face of the portion b

below, while the spring f' is interposed between the under face of said portion b and the

nut e on the end of the rod.

D refers to a step, which is connected to the lower ends of the front rods d by angleirons g, while a connection is provided with the lower ends of the rear rods d by means of inclined braces h, which converge toward 45 each other at their front ends, which are secured to the under side of the step, while the rear ends, i, are formed into square heads and perforated for the passage of the rear rods.

From the foregoing it will be obvious that 50 the free vertical movement of both the seat and step are secured, and the arrangement of

rods and springs such as to enable the seat to automatically resume its normal postion after being depressed.

It will be understood that the improve- 5: ments herein set forth may be applied to various forms of vehicles. It will be obvious that the rods may be hollow as well as solid.

I am aware that heretofore it has been proposed to construct a sulky wherein the verti- ec cal guide-rods were rigidly secured relative to both the axle and seat, so that when the latter descended upon the springs coiled around said rods the latter would extend up at each side, thus rendering them objectionable 65 as well as dangerous. Futhermore, in said prior construction, the rods were rigidly attached at their lower ends by means of locknuts. The rods thus being rigid, receive all the shocks and jars of the vibrating seat, there-70 by increasing the liability of the rods to become loosened or detached.

My invention will be readily distinguished from the above-described construction, in that the rods sink beneath and with the seat as the 75 latter descends, thus permitting the rods to be properly guided in their movements and doing away with all strain or jar thereon.

I claim-

1. The combination, with a vehicle, of cast-80 ings secured to the axle or axle-frame and having vertically perforated sockets, a seat, and rods rigidly connected at their upper ends thereto, and descending therefrom through the said sockets, and coiled springs interposed 85 between said seat and castings, substantially as set forth.

2. The combination, with a vehicle, of castings secured to the axle or axle frame and having vertically perforated sockets, seat, and 90 rods rigidly connected at their upper ends thereto and depending therefrom, a step connected to the rods, and coiled springs interposed between said seat and castings, substantially as set forth.

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

CHARLES BEW.

Witnesses:

WM. H. WALLER, STEPHEN POWERS.