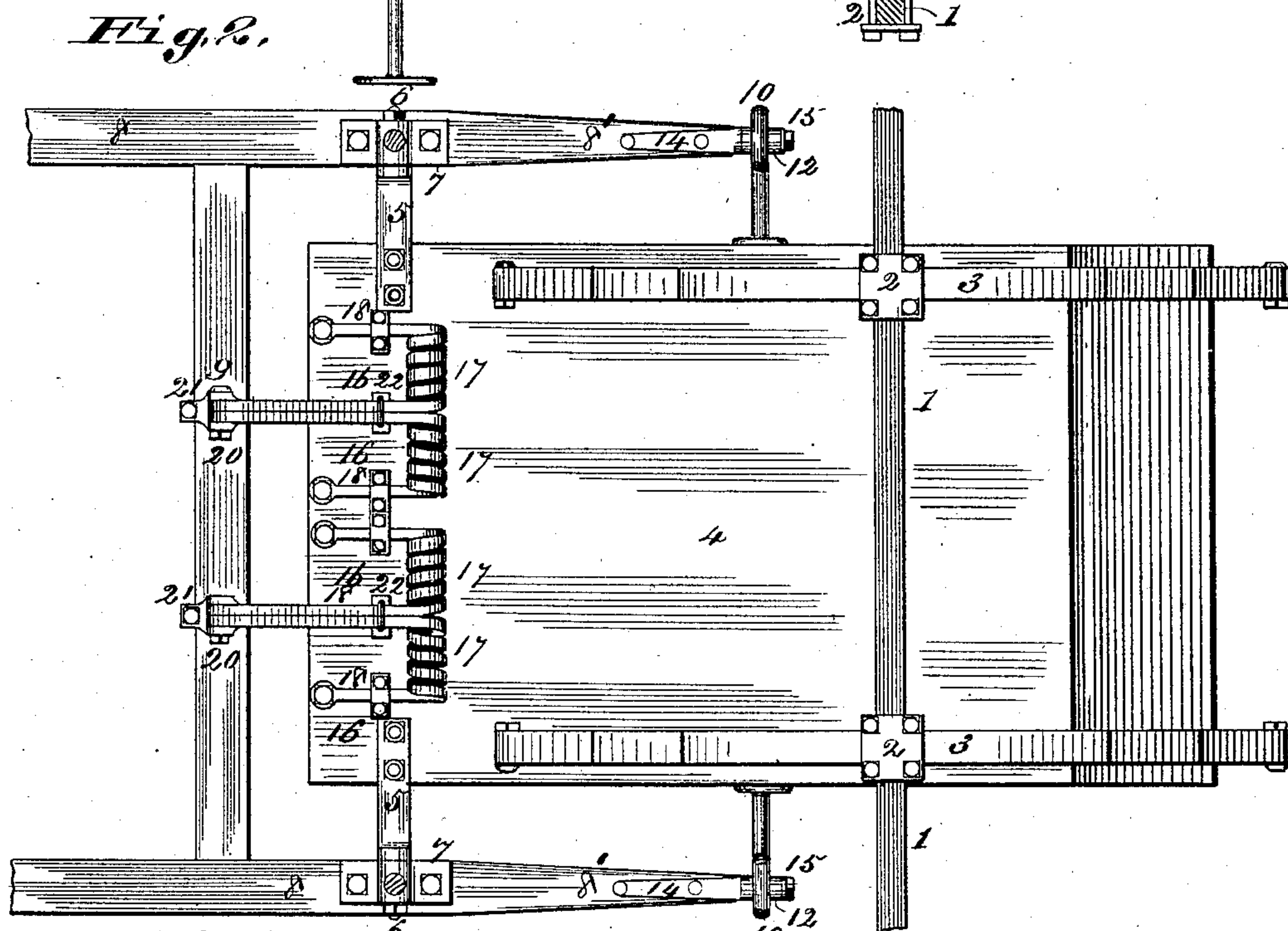
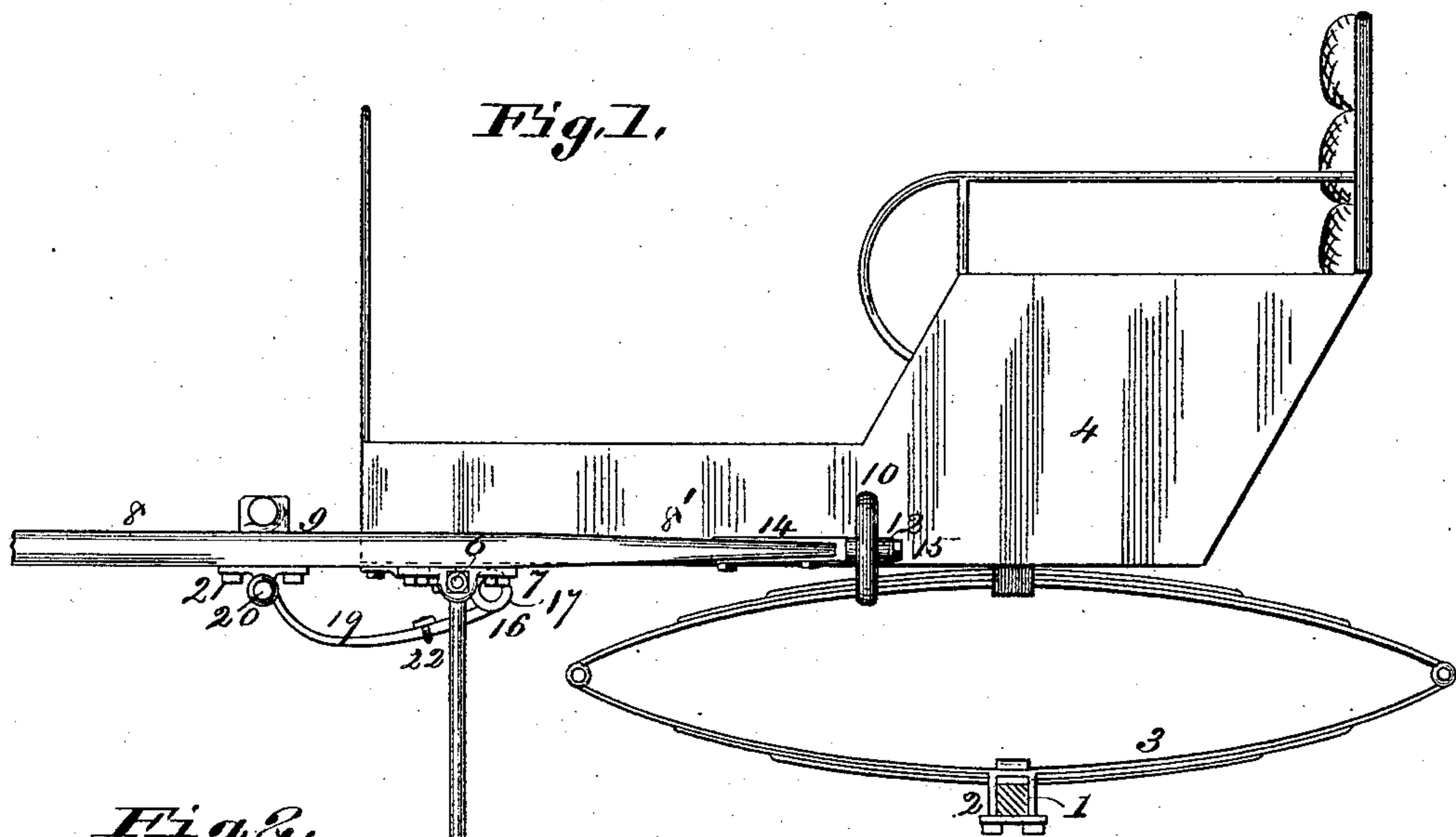


(No Model.)

D. W. HAYDOCK.  
TWO WHEELED VEHICLE.

No. 365,437.

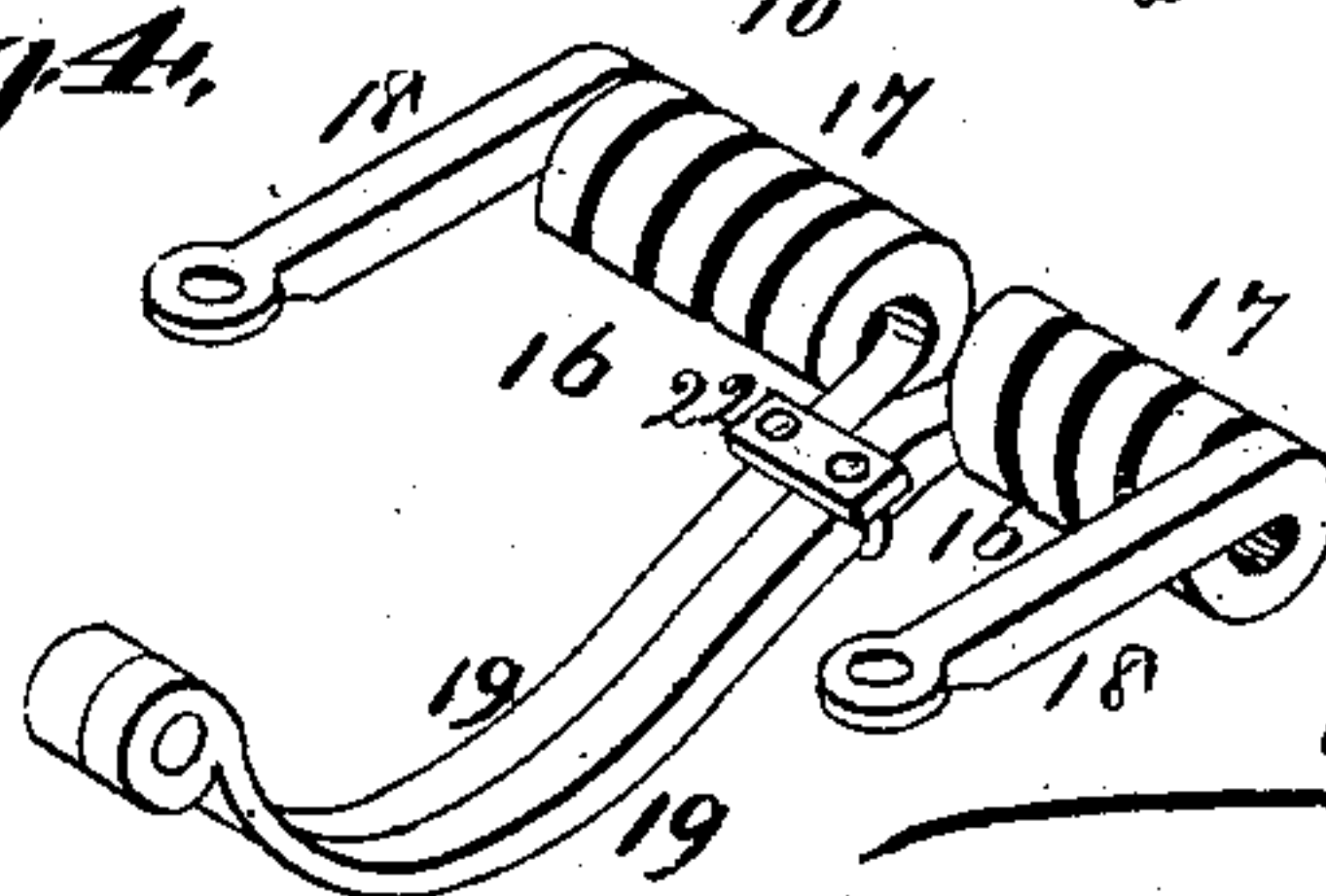
Patented June 28, 1887.



*Fig. 3.*

*Fig. 4.*

*Attest:*  
*F. A. Knight*  
*W. B. Knight*



*Inventor:*

*Daniel W. Haydock.*

*By Knight Bros*  
*attys.*

# UNITED STATES PATENT OFFICE.

DANIEL W. HAYDOCK, OF ST. LOUIS, MISSOURI.

## TWO-WHEELED VEHICLE.

SPECIFICATION forming part of Letters Patent No. 365,437, dated June 28, 1887.

Application filed November 19, 1886. Serial No. 219,407. (No model.)

*To all whom it may concern:*

Be it known that I, DANIEL W. HAYDOCK, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Road-Carts, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, and in which—

10 Figure 1 is a side view of the part of a road-cart to which my device is applied. Fig. 2 is a bottom view of the same. Fig. 3 is a perspective view of the rear end of a thill and the fixed yoke in which it plays. Fig. 4 is a  
15 perspective view of the spring, in which no novelty is claimed *per se*.

The axle is shown at 1, connected by clips 2 to the lower parts of the elliptical springs 3.

20 The body 4 is secured to the upper parts of the springs 3.

5 5 are brackets on the body, whose outer ends are formed into pivot-pins 6, which pass through eye-brackets 7, attached to the under sides of the thills 8. The thills have capacity  
25 for limited movement on the pins 6 as pivots.

9 is the cross-bar of the thills. The oscillatory movement of the thills is limited by yokes 10, which are fixed to the side of the body, and within which the rear ends of extensions 8' of the thills work. These ends carry  
30 a rubber buffer, 12, which surrounds a pin, 13, shown secured to the end of the shaft by tongue or tongues 14, the buffer being held on the pin by a nut, 15.

35 16 16 are spiral springs, arranged in pairs. Each spring is composed of a single bar of steel, a part of which is coiled in a helix, 17,

and one end, 18, being given the form of a bracket. The other end forms an arm, 19, which has an eye at the end to receive the clip-pin 40 20, that passes through the ears of the clip 21, by which the end of the arm is connected to the cross-bar. The two arms of the pair are connected to the cross-bar by a single pin, 20, and clip, 21, and the arms are also connected together 45 nearer the helices by a clip, 22. The springs are secured to the body by the bracket-formed ends 18, as seen in Fig. 2.

The body is so balanced upon the axle that the springs 16 tend to hold the rear ends of 50 extensions 8 of the thills centrally in the yokes 10, so that the thills may move upward or downward with the horse without imparting any oscillation to the body, the springs 16 bending without conveying the "horse-motion" 55 to the body.

I claim herein as new and of my invention—

In a road-cart, the combination, with the body and thills having the splinter or cross-bar 9, of spiral springs 16, having brackets 18, 60 secured to the floor of the body, and arms or elongations 19, secured to said splinter-bar, said arms 19 being bowed downward in order to allow vertical oscillation of the thills, brackets 5, secured to the body and having 65 pivoted on their outer ends the thills, extensions 8' on said thills, a buffer, 12, on the ends of said extensions, and a yoke, 10, secured to the body for limiting the oscillation of the thills, substantially as set forth.

DANIEL W. HAYDOCK.

Witnesses:

SAML. KNIGHT,  
JOS. WAHLE.