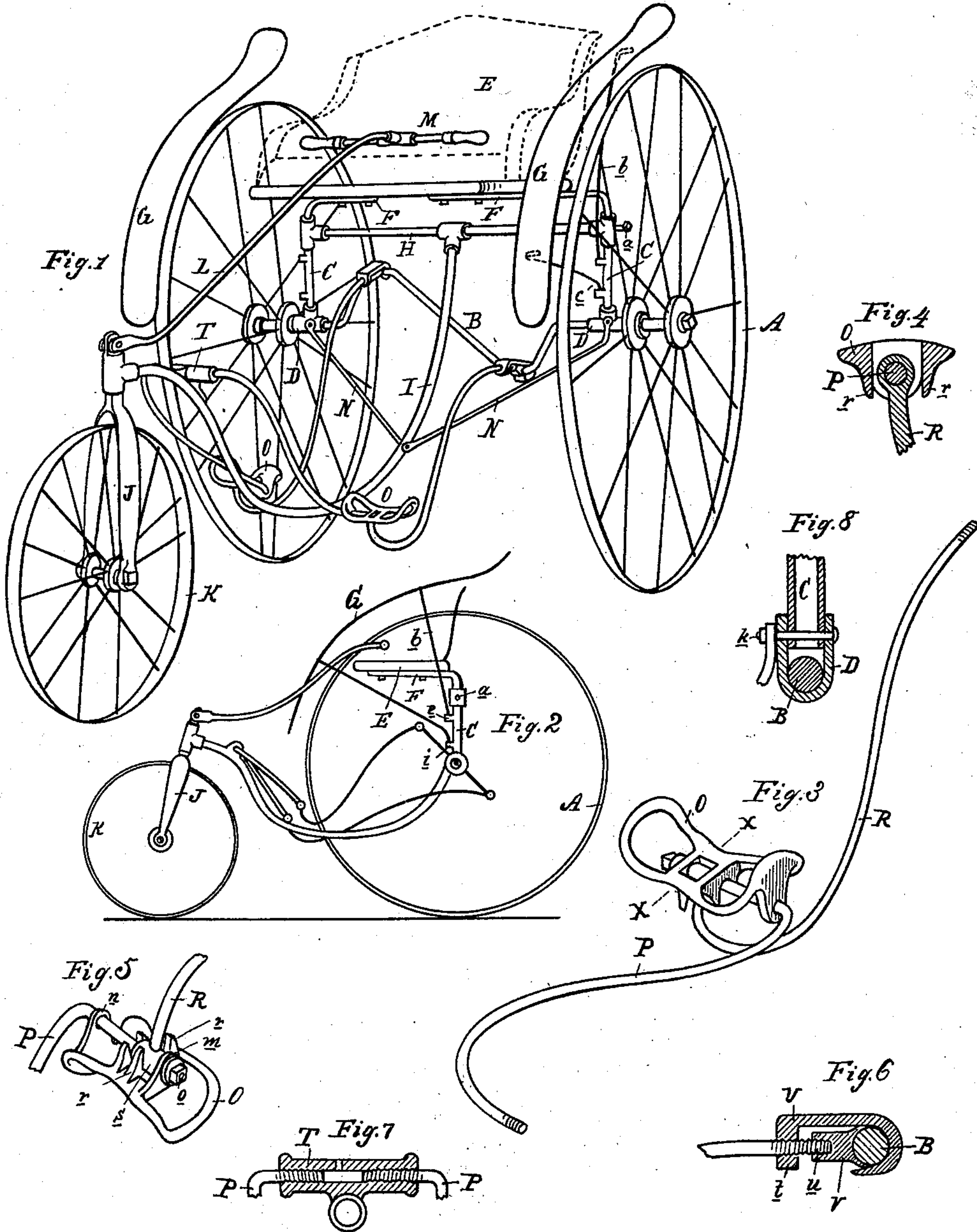


(No Model.)

P. GENDRON.
TRICYCLE.

No. 365,377.

Patented June 28, 1887.



Attest:

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by his Atty
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UNITED STATES PATENT OFFICE.

PETER GENDRON, OF TOLEDO, OHIO.

TRICYCLE.

SPECIFICATION forming part of Letters Patent No. 365,377, dated June 28, 1887.

Application filed January 13, 1887. Serial No. 224,191. (No model.)

To all whom it may concern:

Be it known that I, PETER GENDRON, of Toledo, in the county of Lucas and State of Ohio, have invented new and useful Improvements in Tricycles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

10 This invention relates to new and useful improvements in tricycles.

The invention consists in the peculiar construction of the parts and their combinations, all as more fully hereinafter described and 15 claimed.

Figure 1 is a perspective view of my improved tricycle. Fig. 2 is a diagram elevation. Fig. 3 is a perspective of one pair of pedal-levers disconnected. Fig. 4 is a cross-section on the line *xx*, Fig. 3. Fig. 5 is a perspective of the pedal from the under side. Fig. 6 is a section through the connection of the crank and pedal-lever. Fig. 7 is a cross-section through the stationary fulcrum of the pedal-levers. Fig. 8 is a vertical cross-section through the T-piece and axle.

In the accompanying drawings, which form a part of this specification, A represent the driving-wheels, properly attached to the ends 30 of the double crank-axle B.

C are hollow standards or risers, the lower ends of which are inserted in the T-pieces D, which are properly secured upon the axle near the hubs of the driving-wheels.

35 E is the seat secured to and resting upon the L-shaped springs F, the vertical parts of which fit and enter the standards C, and set-screws *a* are employed to enable the seat to be adjusted and secured at any desired height.

40 G are the fenders, which are not secured to the seat, but, in order that they may always remain in their normal position with relation to the wheels, are supported upon braces *b c*, the free ends of which are entered and secured 45 in sockets *e i*, attached to or formed upon the standards C.

H is a cross-bar, which connects the upper end of the standard and forms a part of the frame of the vehicle.

50 I is the backbone, secured to the longitudinal center of the bar H, while its opposite end is

pivotaly secured to the head of the bifurcated standard J, between the lower ends of which the guide-wheel K is journaled.

L is the guiding-handle, secured to the head 55 of the standard J, and it is provided with a suitable double handle, M. The T-pieces D are not rigidly secured to the axle, but are sleeved thereon, and a bolt, *k*, through such T-piece and the lower ends of the standards C, 60 holds the parts together, while still allowing a slight rocking motion of the standards in the T-piece. The same bolts, *k*, also secure the ends of the braces N, the opposite ends of which are secured to the backbone. 65

O is a pedal, having formed on its under side two ears, *m* and *n*, which have suitable holes formed therein to receive the end of the pedal-lever P, and a nut, *o*, is employed to prevent an accidental disengagement of the parts. 70 There is also formed upon the pedal one or more saddles, *r*.

R is the other pedal-lever, having a thimble, *s*, attached to its end, which is sleeved on that portion of the lever R which forms the shaft of the 75 pedal. The object of the saddle *r* is to prevent the pedal from turning over, and limit its oscillating movement by the impingement of one of the arms of the saddle against the lever R. The other end of the lever R is threaded and 80 inserted and engaged with a thread tapped into the end of the stationary fulcrum T; and as there are two systems of pedals and levers, one on each side of the backbone, it necessarily follows that the threads in opposite ends of the 85 stationary fulcrum must run in opposite directions to engage with the corresponding threads on the engaging ends of the levers P. This stationary fulcrum is secured to and across the backbone I, and the engagement of the levers 90 P therewith is such as to confine the latter in place laterally, and at the same time not interfere with the necessary slight oscillation of the ends of the levers, the two ends of which are bent at right angles, or nearly so, and in opposite 95 directions to the body or main part of the lever to facilitate the engagement thereof with the pedal and with the stationary fulcrum. The opposite end of the lever R is also threaded, and passes through the flange *t* of the hook-shaped plate U, the hook part of which embraces the axle B. This end of the lever R en- 100

ters the threaded socket *u* in the block *V*, the opposite end of which is concave, as shown in Fig. 6, and which, with the hook end of the plate *U*, forms a box in which the axle runs.

5 What I claim as my invention is—

1. In a tricycle, a seat supported upon L-shaped springs, one end of which is inserted within a hollow standard and is vertically adjustable therein, substantially as described.

10 2. In a tricycle, and in combination with a crank-axle, a pedal-lever, one end of which is attached to a pedal, the other end of said lever being attached to said axle by means of a hook-plate and concave-faced block interposed between the end of the lever and the axle, substantially as set forth.

15 3. In a tricycle, the frame thereof, consisting of hollow standards stepped and secured in the axle-boxes, a cross-bar connecting the upper ends of the standards, a centrally-located backbone connecting the cross-bar with the head of the guide-wheel standard, and having trans-
20 versely secured thereto a stationary fulcrum,

and the braces *N*, connecting said axle-boxes and backbone, substantially as described. 25

4. In a tricycle, and in combination with the frame thereof, a stationary fulcrum, interiorly threaded right or left, and a pair of pedal-levers connecting such stationary fulcrum with the pedals, substantially as specified. 30

5. In a tricycle, and as a means of giving motion thereto, the combination of the pedals *O* and levers *P* and *R*, the lever *P* having its ends bent substantially at right angles to and in opposite directions to the main part of the lever, and the parts being constructed, arranged, and operating substantially as set forth. 35

6. In a wheel-vehicle, the fenders *G*, supported by means of braces stepped or secured in sockets or eyes upon the hollow standards, substantially as specified. 40

P. GENDRON.

Witnesses:

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E. SCULLY.