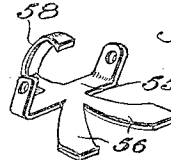
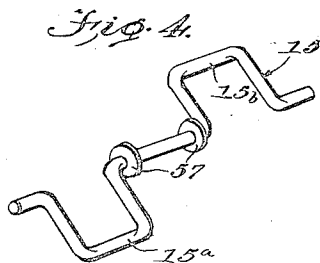
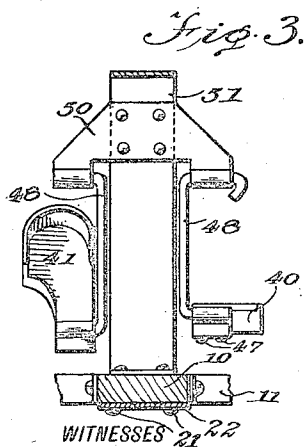
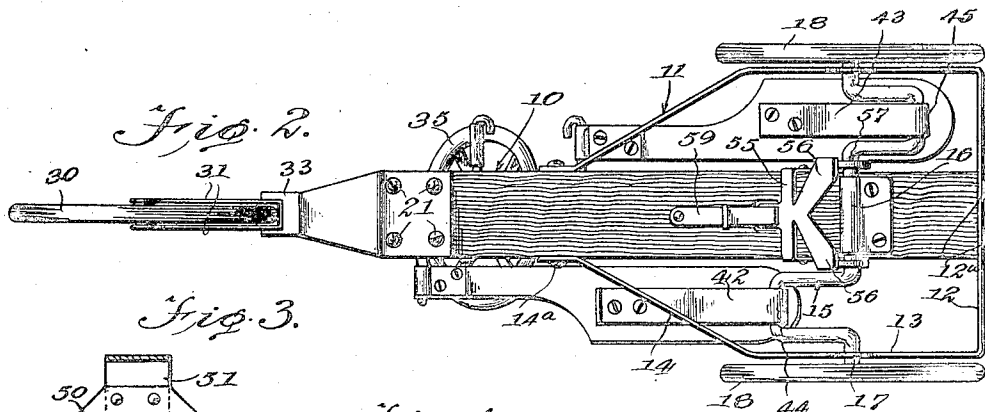
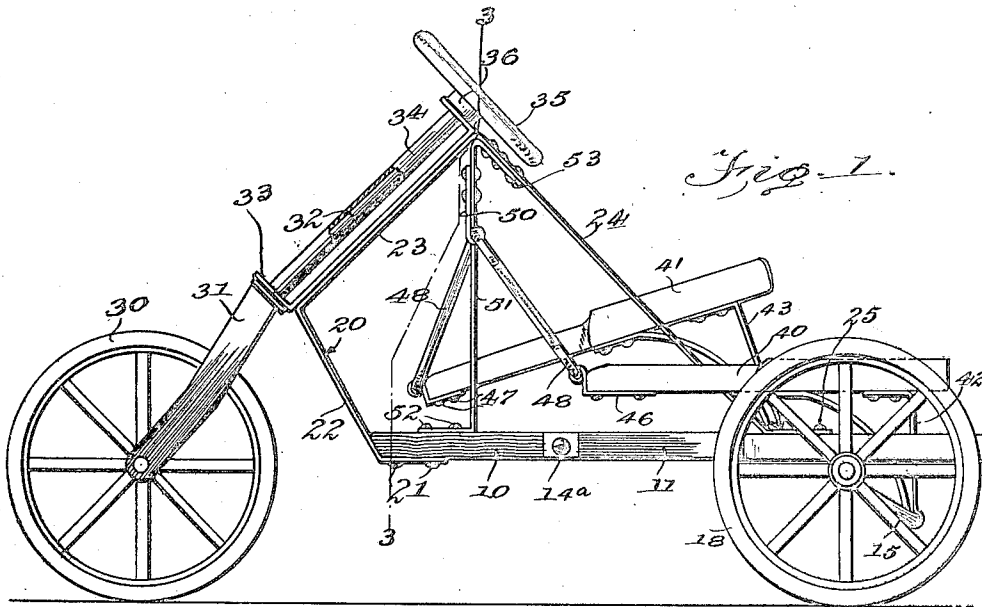


Feb. 6, 1923.

1,444,320.

C. M. McCORMICK,
CHILD'S VEHICLE.
FILED FEB. 23, 1922.



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UNITED STATES PATENT OFFICE.

CHARLES M. McCORMICK, OF PUEBLO, COLORADO, ASSIGNOR OF ONE-THIRD TO JOHN A. FEIST AND ONE-THIRD TO JAMES TRUMAN, BOTH OF PUEBLO, COLORADO.

CHILD'S VEHICLE.

Application filed February 23, 1922. Serial No. 538,634.

To all whom it may concern:

Be it known that I, CHARLES M. McCORMICK, a citizen of the United States, and a resident of Pueblo, in the county of Pueblo and State of Colorado, have invented certain new and useful Improvements in Children's Vehicles, of which the following is a specification.

The present invention relates to improvements in child's vehicle, and has for its object to provide a device of this character which is adapted to be propelled by the user in such manner as to bring about not only individual development of the various muscles but also co-ordination between them and which develops the sense of equilibrium of the user and his ability to maintain his balance and which in general affords a healthy and entertaining form of outdoor exercise and amusement.

Another object is to provide a device of this character which is of simple and durable construction, reliable and safe in operation and comparatively easy and inexpensive to manufacture.

A further object is to provide a device of this character which is flexible in operation and completely under the control of the operator.

Other objects and advantages of the invention reside in certain novel features of construction, combination and arrangement of parts which will be hereinafter more fully described and particularly pointed out in the appended claims, reference being had to the accompanying drawings forming part of this specification, and in which:

Figure 1 is a view in side elevation of the preferred embodiment of the invention;

Figure 2 is a bottom plan view thereof;

Figure 3 is a view in section, on line 3-3 of Figure 1;

Figure 4 is a detail perspective view of the crank shaft; and

Figure 5 is a similar view of the brake.

Referring to the drawings wherein for the sake of illustration is shown the preferred embodiment of the invention, the numeral 10 designates generally a longitudinally extending platform which may be constructed of wood and with which a metallic frame 11 is associated. The metallic frame 11 includes a transverse bar 12, longitudinally extending side bars 13 and forwardly converging front bars 14. The transverse bar 12 is

secured to the rear end of the platform 10, as at 12^a and the forwardly converging front bars 14 are secured to the front of the platform 10, as at 14^a, and in this manner the metallic frame is organized with the platform, the platform and metallic frame together thus constituting a main frame.

A crank shaft 15 is journaled in a bearing 16 provided therefor on the platform and in suitable bearings 17 provided in the side bars 13 of the metallic frame member. The ends of the crank shaft 15 project beyond the side bars 13 of the main frame and to these ends ground wheels 18 are fixed.

At the forward end of the platform 10 a superstructure or auxiliary frame 20 is arranged, the superstructure being secured, as at 21, to the underside of the forward end of the platform 10 and including bars 22, 23 and 24 which lie in the vertical plane of the platform, the bar 22 extending forwardly of the platform and the bars 23 and 24 extending rearwardly of the platform and overlying the same, as clearly shown in Figure 1. The end of the bar 24 is offset and secured to the platform, as at 25.

A steering wheel 30 is provided and is rotatably journaled in a pair of forks 31, the forks having a spindle 32 which is rotatably journaled in suitable bearings provided therefor in a bracket 33, the bracket being secured to the bar 23 of the superstructure as shown in Figure 1. A sleeve 34 is arranged on the spindle 32 between the bearings of the bracket and beyond the uppermost bearing of the bracket a steering wheel 35 is fixed to the spindle and provided with a hub 36 engageable with the uppermost bearing of the bracket.

Propulsion means is provided and includes a pair of foot plates 40 and 41. The foot plates having depending from their rear ends crank hangers, designated at 42 and 43, the crank hangers having bearings 44 and 45 therein which rotatably embrace the cranks 15^a and 15^b of the crank shaft 15. These cranks are of opposite throw, that is they are spaced angularly a distance of 180° from each other. At their forward ends the foot plates 40 and 41 have attaching brackets designated at 46 and 47 respectively by means of which they are pivotally connected to one end of links indicated at 48. These links are pivotally supported upon a cross head 50 secured to a standard 51 which is

fastened at its lower end to the platform, as indicated at 52 and which is bolted or riveted at its upper end to the bar 24 of the superstructure, as indicated at 53.

5 Braking mechanism is provided for retarding the motion or stopping the device when desired, and preferably this braking mechanism comprises a swinging carrier 55
10 pivotally supported upon the platform 10 and having integral therewith braking shoes 56 which are adapted to be brought into frictional engagement with braking disks 57
15 secured to the crank shaft 15 at the opposite sides of the bearing 16. The carrier 55 has also integral therewith and rigidly secured therewith an operating arm 58 which extends up through a slot provided therefor in the platform and which is adapted to be engaged by the foot of the operator for actuating the brake. A flat spring 59 is secured to the underside of the platform and engages the arm 58 to normally swing the carrier 55 to such position that the brake shoe will be resiliently held out of engagement with the disk 57.

When the device is being utilized, the operator that is the person using the toy, stands upon the foot plates 40 and 41 with one foot resting upon the foot plate 40 and
30 the other foot resting upon the foot plate 41. The operator grasps the steering wheel 35 and steadies himself as well as steers the vehicle in this manner. Then by shifting the weight and using the muscles of the legs and body as well as of the arms, the operator imparts alternate operative movements to the crank 15^a and 15^b of the crank shafts through the medium of the foot plates 40 and 41 and the crank hangers 42 and 43.
40 The foot plates being pivotally connected to the links which in turn are pivotally connected to the cross head are free to partake of the necessary movement to bring about the rotation of the crank shaft. The
45 rotation of the crank shaft is in turn communicated to the wheels which are fixed to the ends thereof, and this causes the vehicle to be advanced or progressed at the required speed.

50 I claim:

1. In a device of the character described, a platform, a frame connected with said platform, a crank shaft, bearings for said crank shaft arranged on said platform and
55 said frame, ground wheels fixed to said

crank shaft, said crank shaft having cranks of opposite throw, a superstructure secured to said platform, a bracket arranged upon said superstructure, a steering wheel rotatably supported on said bracket, and propelling means including a pair of foot plates, a crank hanger carried by each of said foot plates and having a bearing rotatably engaging one of the cranks of the crank shaft, a standard secured at its lower end to the platform and at its upper end to the superstructure, a cross head carried by said standard and links pivotally supported upon said cross head and pivotally connected to said foot plates.

2. In a device of the character described, a longitudinally extending platform, a metallic frame having a transverse bar secured intermediate its ends to the rear of said platform, side bars extending parallel to the platform, and forwardly converging front bars secured at their forward ends to said platform, a crank shaft, bearings for said crank shaft arranged on said platform and in the side bars of said metallic frame, said crank shaft having ends projecting beyond said side bars, ground wheels fixed to the ends of said crank shaft, a superstructure secured to the platform and overlying the same, a bracket supported upon the superstructure, a steering wheel rotatably supported on the bracket and propulsion means cooperable with the crank shaft and including a pair of foot plates, a standard secured at its lower end to the platform and at the upper end to the superstructure, a cross head carried by the standard, and links pivotally supported upon the cross head and pivotally connected to said foot plates.

3. In a device of the character described, a main frame, a shaft rotatably mounted on the frame, ground wheels fixed to the shaft, a superstructure secured to the frame and overlying the same, and propulsion means for the shaft including a pair of foot plates operatively connected with the shaft, a standard secured at its lower end to the frame and at its upper end to the superstructure, a cross head carried by the standard and links pivotally supported upon the cross head and pivotally connected to the plates.

CHARLES M. McCORMICK.