Sept. 10, 1935. C. SCHWEDHELM 2,013,843

TOY

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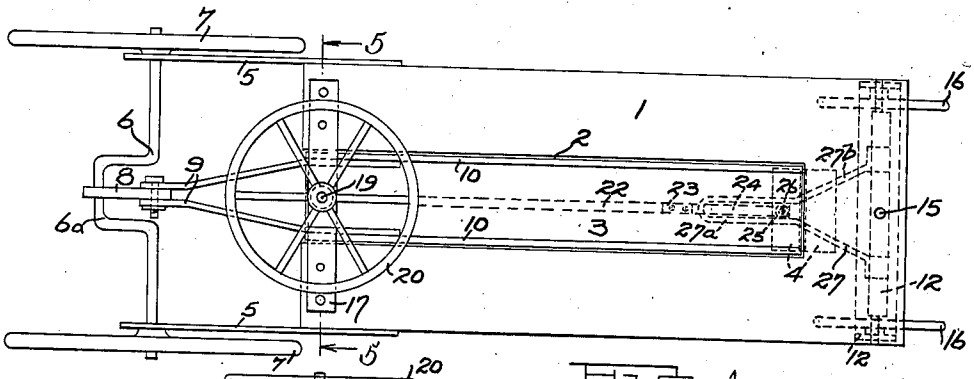


Fig. 1.

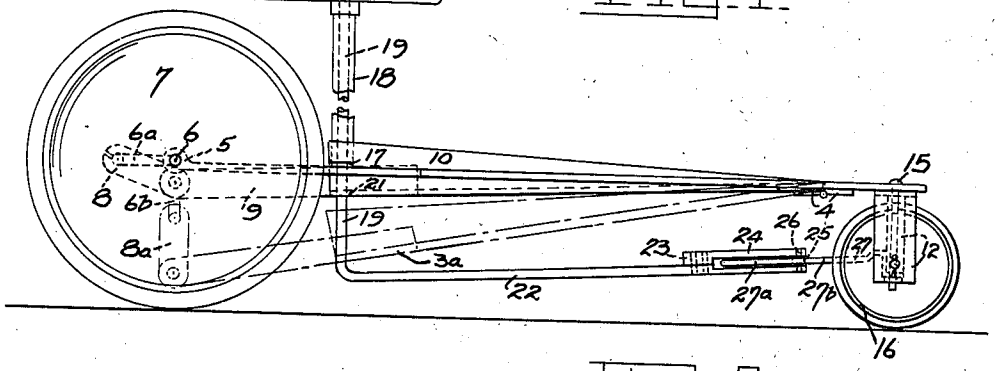


Fig. 2.

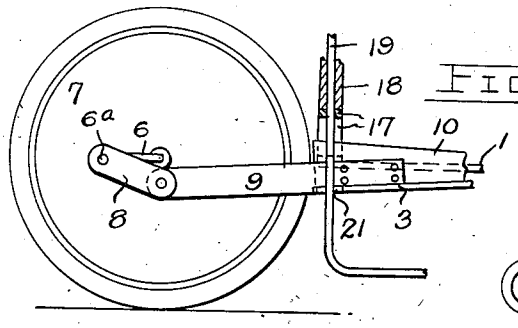


Fig. 4.

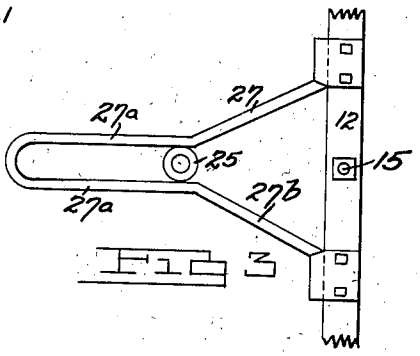


Fig. 3

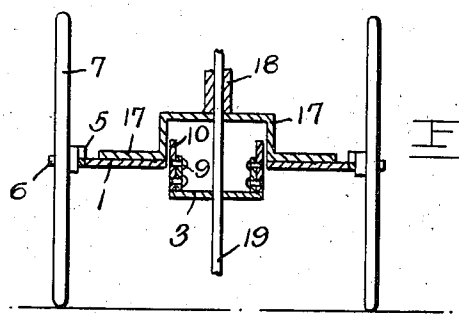


Fig. 5.

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TOY

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1 Claim. (Cl. 208—113)

This invention relates to improvements in toys, and refers more particularly to the type of toys known as "scooters".

It is an object of the invention to provide such a toy wherein a treadle having upwardly directed guards along its longitudinal margins is movable in a slot formed lengthwise of a base from its front extremity; wherein the rear margin of the treadle is pivoted on the base; and wherein the front extremity of the treadle is so connected to a front axle on which wheels are fixed that reciprocation of the treadle imparts rotation to the axle.

Another object of the invention is to provide such a toy wherein a vertically disposed steering spindle extends beneath the base and has its lower extremity rearwardly flexed to operate a yoke the laterally disposed ends of which are secured to a rear axle so that rotation of the spindle turns the rear axle which is pivoted beneath the base.

A further object of the invention is to provide such a toy wherein the forwardly extending end of the yoke has parallel sides between which a roller carried by the rear extremity of the flexed spindle extends, so that the roller may freely turn the rear axle through the said yoke when the spindle is rotated.

Yet another object of the invention is to provide such a toy which is cheap and simple to manufacture and safe to operate.

With these and other objects and advantages in view which will become apparent as the specification proceeds, the invention is hereinafter more fully described with the aid of the accompanying drawing, in which:

Figure 1 illustrates a plan view of the invention.

Figure 2 is a side elevation thereof, and

Figure 3 is a detail showing an inverted plan of a portion of the rear axle, the yoke and the roller.

Fig. 4 is a detail showing an elevation of the propelling means at the front of the vehicle, and certain parts of the steering device in section.

Fig. 5 is a vertical transverse section taken on the plane of the line 5—5 in Fig. 1.

Referring to the drawing, 1 designates a base having a longitudinal slot 2 formed therethrough which extends rearwardly from the front of the base substantially centrally of its width. Movable in the slot 2 is a treadle 3 to the rear extremity of which a hinge 4 is secured while the other portion of the said hinge is fastened to the underside of the base 1 adjacent the rear extremity of the said slot.

Extending forwardly from opposite sides of the base 1 are brackets 5 in which a cranked shaft 6 is mounted. Fixed on the extremities of the latter are wheels 7. Rotatably mounted on the crank 6a of the shaft 6 is a link 8, and extending forwardly from the treadle 3 are fork members 9 which at their outer ends are pivotally secured to the opposite extremity of the said link. Upwardly directed guards 10 are secured to the opposite longitudinal margins of the treadle 3, so that as the latter is vertically reciprocated the user's foot cannot be trapped between the treadle 3 and the base 1. 3a indicates the bottom position of the treadle and when the latter is so positioned the crank and link are located as shown at 6b and 8a respectively.

From the above it is believed obvious that when the treadle 3 is vertically reciprocated the cranked shaft 6 and wheels 7 are rotated and the vehicle is moved along the ground.

Extending transversely beneath the rear portion of the base 1 is a rear axle 12 which is secured pivotally thereto by a vertical pin 15 located substantially centrally of the width of the said base and axle. Suitably mounted on the extremities of the rear axle 12 are wheels 16. Extending transversely of the front portion of the base 1 across the slot 2 and secured to the said base is a bracket 17 from which a tubular support 18 projects upwardly substantially centrally of the width of the vehicle. Extending through the said support 18 is a steering spindle 19 having a steering wheel 20 secured around its upper extremity. This spindle 19 projects beneath the support 18 through an aperture 21 formed in the treadle 3 and from its lower extremity a rearward and substantially horizontal extension 22 projects. Adjacent the rear extremity of the extension 22 an element 23 is secured thereon which has a rearwardly disposed arm 24 spaced above the said extension. This arm terminates immediately above the end of the said extension. Between the extension 22 and arm 24 adjacent their rear extremities a roller 25 is arranged which is mounted upon an axle 26 extending vertically through said extension and arm.

27 denotes a yoke the extremities of which are secured to the rear axle 12 one on each side of the pin 15 and substantially equidistant therefrom. This yoke projects forwardly and terminates at its front extremity in a portion having parallel sides 27a the spacing between which

is substantially the same as the diameter of the roller **25** which rests between them, and the height of the parallel yoke sides **27***a* is slightly less than the spacing between the extension **22** and arm **24**.

From the above it will be clearly seen that when the steering wheel **20** is turned the extension **22** is swung towards one side of the vehicle thereby causing the yoke **27** to swing and through it turning the rear axle **12** about the pin **15**. In order to obtain satisfactory results it is found that the rear portions **27***b* of the yoke **27** must be rearwardly and outwardly inclined.

From the foregoing it is believed that the construction and operation of the toy will be readily understood, and while the preferred embodiment thereof has been described and shown it is understood that the construction is susceptible to such alterations and modifications as fall within the scope of the appended claim.

What I claim as my invention and desire to secure by Letters Patent is:

In a vehicle, the combination of a base, front wheels mounted thereon, means arranged on said base for causing rotation of the front wheels, a rear axle pivotally mounted centrally of its length beneath the base, a rear wheel mounted on each extremity of the rear axle, a yoke the extremities of which are secured to said axle equidistant from and on opposite sides of its pivotal mounting, a steering spindle rotatably mounted on the base and extending both above and beneath the latter, a rearward extension integral with the lower extremity of the spindle, an arm spaced from said extension and positioned in vertical alignment with the rear extremity thereof, the front end of said arm being secured to said extension, a roller rotatable about a vertical axis between said arm and said extension and supported at its ends by the said arm and said extension, the intermediate portion of the yoke having parallel spaced sides against which opposite sides of the roller bear so that as the spindle is turned the intermediate spaced sides of the yoke move longitudinally relative to the roller and turn the rear axle.

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