A. HIRMER.

TOY.

APPLICATION FILED AUG. 13, 1910.

1,003,359. Patented Sept. 12, 1911.

2 SHEETS—SHEET 1.

Fig. 2.

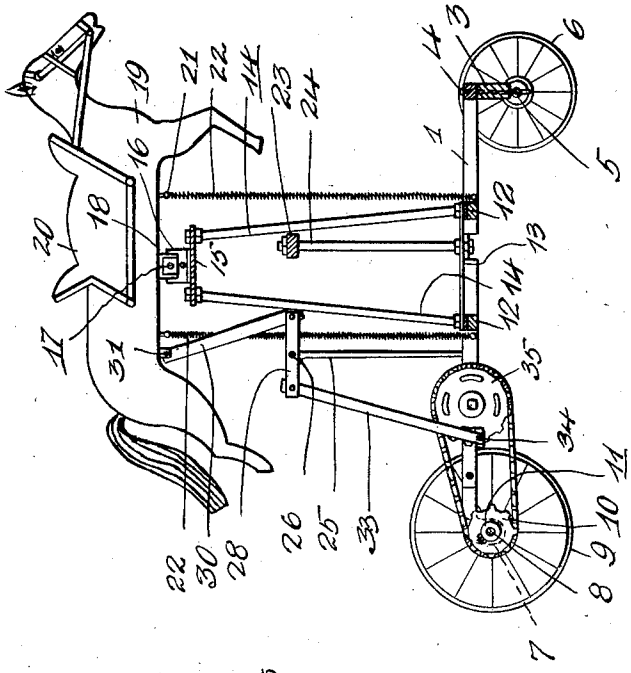
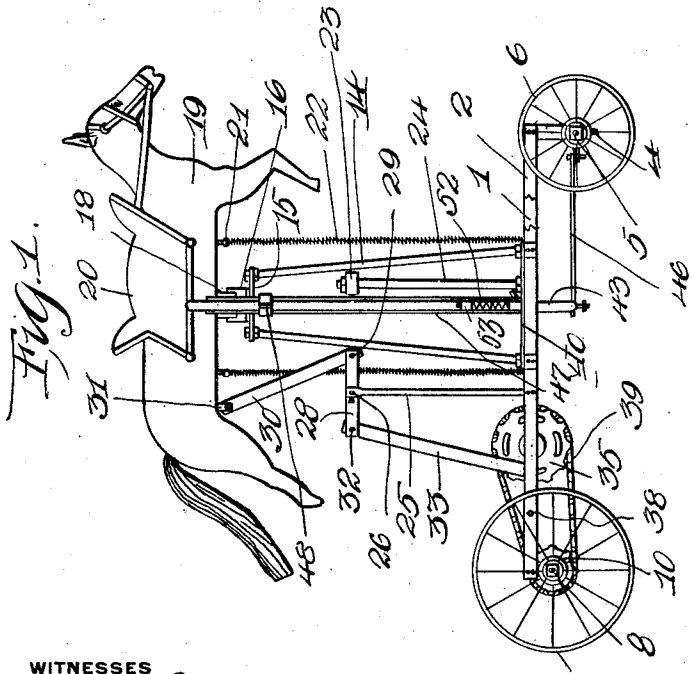


Fig. 1.



WITNESSES

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2 SHEETS—SHEET 2.

Fig. 4.

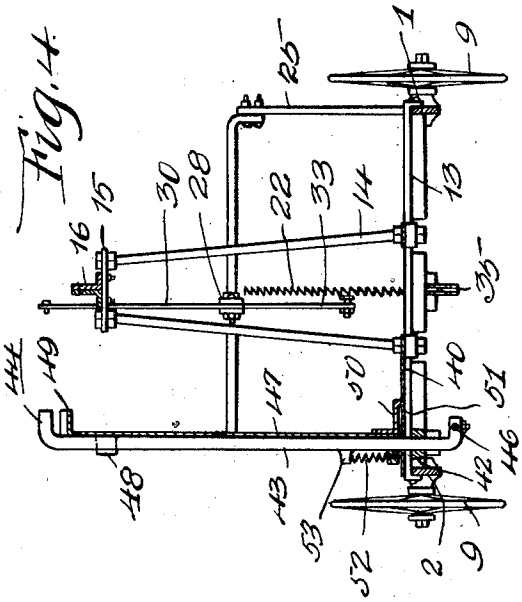


Fig. 5.

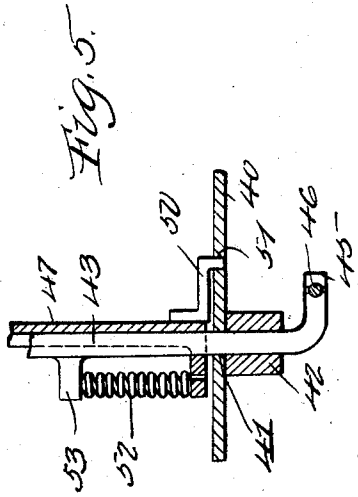
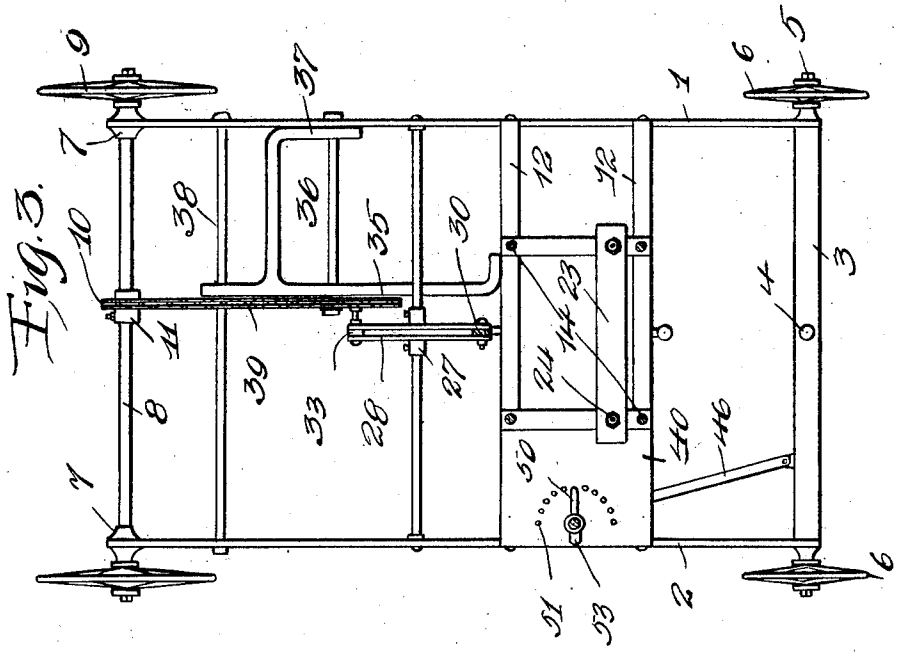


Fig. 3.



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1,003,359. Specification of Letters Patent. Patented Sept. 12, 1911.

Application filed August 13, 1910. Serial No. 576,944.

To all whom it may concern:

Be it known that I, ANDREW HIRMER, a citizen of the United States of America, residing at Millvale, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Toys, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to toys, and the primary object of the invention is to combine a truck and a hobby-horse and provide novel means in connection with the truck and the hobby-horse whereby an oscillatory or rocking movement of the horse will cause the truck to move over a surface, thus allowing the occupant of the hobby-horse to propel the truck.

A further object of the invention is to provide positive and reliable means in connection with a toy of the above type whereby the occupant of the hobby-horse can easily and accurately guide the truck.

A still further object of the invention is to provide a toy of the above type that can be safely used by juveniles, the toy on account of its realistic qualities affording considerable amusement.

With these and such other objects in view as may hereinafter appear the invention consists of the novel construction, combination, and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawings forming a part of this specification, wherein there is illustrated a preferred embodiment of the invention, but it is to be understood that the structural elements thereof are susceptible to such changes as fall within the scope of the appended claim.

In the drawings: Figure 1 is a side elevation of the toy. Fig. 2 is a longitudinal sectional view of the toy partly in elevation. Fig. 3 is a horizontal sectional view of the same. Fig. 4 is a vertical sectional view of a portion of the toy, and Fig. 5 is an enlarged vertical sectional view of a lock forming part of the guiding mechanism.

A toy in accordance with this invention embodies a truck, a pedestal located centrally thereof, a miniature horse, such as a rocking horse fulcrumed upon the pedestal, a propelling mechanism in connection with the horse and truck, and a guiding mechanism for the truck.

The truck comprises side frames 1 and 2 having the forward ends thereof connected by a bolster 3 and pivotally connected to said bolster intermediate the ends thereof by a vertical pin 4 is a forward axle 5 having the ends thereof provided with revoluble wheels 6 adapted to support the forward end of the truck. The rear ends of the side frames 1 and 2 are provided with hangers 7 for a revoluble rear axle 8 and mounted upon the ends of said axle are wheels 9 adapted to support the rear end of the truck. The axle 8 intermediate the ends thereof is provided with a small sprocket wheel 10, said wheel having the hub 11 thereof fixed to the revoluble axle 8.

The pedestal comprises transverse supporting beams 12 having the ends thereof suitably secured to the side frames 1 and 2 and connecting said beams intermediate the ends thereof are longitudinal bars 13 supporting four equally spaced uprights 14, said uprights having the upper ends thereof connected by a plate 15. This plate is provided with a central bearing 16 and pivotally connected to said bearing by a pin 17 is a bearing 18, carried by the under side of an oscillatory member 19, said member representing a miniature horse having a saddle or seat 20. The under side of the oscillatory member 19 is provided with depending staples 21 and these staples are connected by retractile springs 22 to the beams 12, said springs normally supporting the member 19 in a horizontal position, but assisting the occupant of the seat or saddle 20 in oscillating the member. A foot-rest 23 is provided for the occupant of the seat or saddle 20, said foot-rest being supported by uprights 24 from the bars 13.

The propelling mechanism comprises standards 25, carried by the frames 1 and 2, said standards having the upper ends thereof connected by a shaft 26. Fulcrumed upon the shaft 26 between collars 27 secured thereto is a rock-head 28 having the forward end thereof pivotally connected, as at 29, to an arm 30, said arm having the upper end thereof pivotally connected to a bearing 31 carried by the rear under side of the oscillating member 19. The rear end of the rock-head 28 is pivotally connected, as at 32, to a pitman 33, said pitman having the lower

end thereof pivotally connected to the wrist pin 34 of a large sprocket wheel 35. The sprocket wheel 35 is revolubly mounted upon the end of a bolt 36 connecting the central part of a bracket 37 to the frame 1, the forward end of said bracket being secured to the rear beam 12 and the rear end of said bracket to a transverse tie-rod 38 connecting the frames 1 and 2. Movably mounted upon the sprocket wheels 10 and 35 is an endless sprocket chain 39.

The guiding mechanism comprises a small platform 40 mounted upon the beams 12 adjacent to the frame 2. The platform is provided with a vertical opening 41 and with a depending sleeve 42 surrounding the lower end of the opening, said sleeve constituting a guide bracket for a vertical shaft 43 having the upper end thereof bent to provide a handle 44 within easy reach of the occupant of the saddle or seat 20 of the member 19. The lower end of the shaft 43 is provided with a crank 45 pivotally connected to a rod 46 having the forward end thereof pivotally connected to the forward axle 5 adjacent to the frame 2. Slidably connected to the shaft 43 is a vertical locking member 47 retained in engagement with said shaft by lugs 48. The upper end of the locking member 47 has a handle 49 in proximity to the handle 44 of said shaft and the lower end of said member has a tooth 50 for engaging in openings 51 provided therefor in the platform 40, said openings being arranged in a semi-circle relatively to the shaft 43 whereby said shaft can be easily locked in adjusted position. To normally retain the tooth 50 in engagement with the platform 40, the lower end of the locking member 47 is connected by a compression spring 52 to a lug 53, carried by the shaft 43, said spring normally holding the locking member 47 in a lowered position whereby it will be necessary to raise said member when it is desired to shift the shaft 43.

It is apparent that when the member 19 is oscillated by the occupant of the seat or saddle 20 that through the medium of the pivoted arm 30, rock-head 28, and pitman 33 the large sprocket wheel 35 will be rotated upon the end of the bolt 36, and through the medium of the sprocket chain 39 the small sprocket wheel 10 and the rear axle 8 will be revolved, causing the toy to move forward.

It is thought that the operation and utility of the guiding mechanism will be apparent without further description, and I hereby reserve the right to use such materials in the construction of the toy as will insure a strong, durable, and safe structure. It is preferable, however, to make the entire structure of metal, with the exception of the oscillating member 19, which can be made of wood.

What I claim, is:

A toy vehicle comprising a truck provided with a bolster at its forward end, an axle pivotally connected to said bolster, revoluble wheels upon said axle, hangers at the rear of said truck, a revoluble axle mounted in said hangers and provided with wheels, a sprocket upon the rear axle, a plurality of transversely-extending supporting beams on the frame, longitudinal bars connected to said beams, a series of inclined uprights supported by said beams and bars, a plate connecting the ends of said uprights together, an oscillatory member arranged over said uprights, means interposed between said member and said plate for pivotally supporting the member, a foot rest supported by said platform, a pair of springs connected at their lower ends to said beams and at their upper ends to said member, one of said springs arranged forwardly of the uprights and the other rearwardly thereof, a shaft, supporting means therefor mounted upon said platform rearwardly of said uprights, a rock head fulcrumed upon said shaft, an arm pivotally connected to said member and to one end of said rock head, a pitman pivotally connected to the other end of said rock head, a sprocket wheel supported by the platform and to which the pitman is connected, and a sprocket chain connecting said sprockets together.

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

ANDREW HIRMER.

Witnesses:
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C. T. HOOD.