A. W. SWENDER.

HOBBY HORSE.

APPLICATION FILED JULY 22, 1912.

1,088,185. Patented Feb. 24, 1914.

Fig. 6.

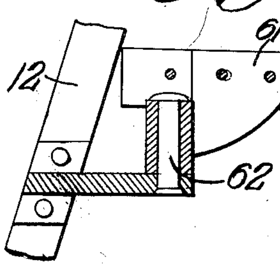


Fig. 1.

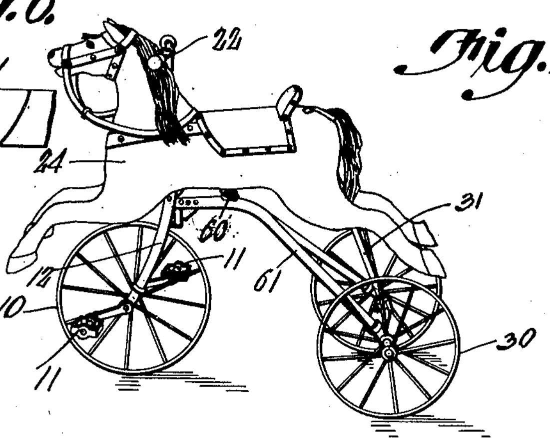


Fig. 2.

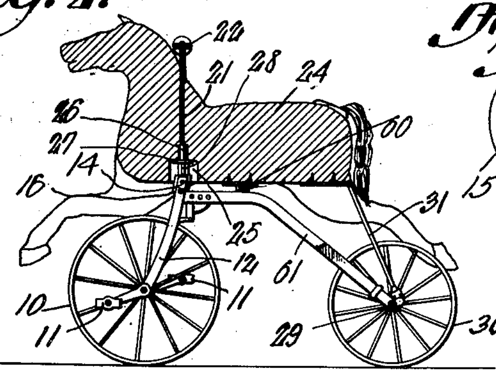
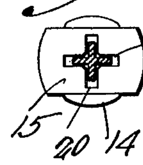


Fig. 5.



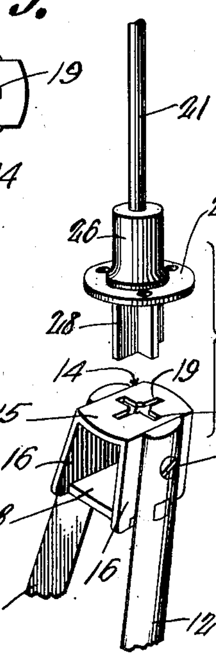
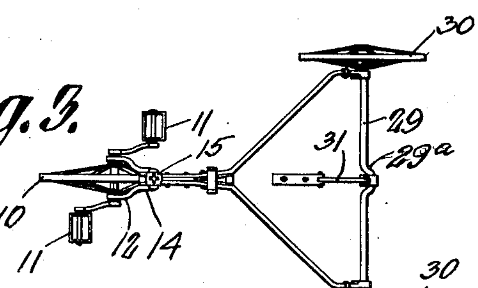


Fig. 4.

Fig. 3.



Witnesses

A. W. Swender Inventor

by C. A. Snow & Co. Attorneys

UNITED STATES PATENT OFFICE.

ALBERT W. SWENDER, OF ST. LOUIS, MISSOURI.

HOBBY-HORSE.

1,088,185. Specification of Letters Patent. Patented Feb. 24, 1914.

Application filed July 22, 1912. Serial No. 710,935.

To all whom it may concern:

Be it known that I, ALBERT W. SWENDER, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented a new and useful Hobby-Horse, of which the following is a specification.

The device forming the subject matter of this application is a wheel mounted toy of the hobby horse type, and it is the object of the invention to provide a novel connection between the steering element and the wheel carrying member, whereby the body of the toy may be permitted to tilt upon the support to which the body is pivoted, and upon which the wheel carrying member is journaled for rotation.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—Figure 1 shows in perspective, a wheel mounted toy of the hobby horse type in which the present invention is embodied; Fig. 2 is a side elevation of a toy constructed in accordance with the present invention, the body portion of the device being depicted in vertical longitudinal section; Fig. 3 is a top plan of the support and attendant parts, the body portion of the structure having been removed; Fig. 4 is a perspective view, showing, in spaced relation, the lower end of the steering element and the upper end of the wheel carrying member; Fig. 5 is a horizontal section, the cutting plane being passed along the upper end of the wheel carrying member and through the lower end of the steering element; Fig. 6 is a sectional detail showing one means whereby the wheel carrying member may be journaled upon the support.

The toy forming the subject matter of this application comprises a support 61. A body 24 shown in the present instance as resembling a horse, is located above the support 61. Intermediate its ends, the body 24 is pivoted as indicated at 60 to the support 61, the construction being such that the body 24 may have a slight tilting movement in a vertical plane.

The invention further includes a wheel carrying member, this wheel carrying member being a composite structure. The wheel carrying member includes a box like head 14, shown best in Fig. 4, the head 14 comprising a top plate 15, a bottom plate 18 and side walls 16 connecting the top plate with the bottom plate. The wheel carrying member further includes forks 12, applied to the side walls 16 and held in place by screws 17 or in any other suitable manner. A propulsion wheel 10 is journaled in the lower ends of the forks 12 of the wheel carrying member and is actuated by pedals 11. The wheel carrying member above described is journaled upon the support 61 so that the wheel 10 may be moved laterally to permit the vehicle to be steered. Any common and wellknown means may be provided for operatively connecting the wheel carrying member with the support 61. One such means is shown in Fig. 6, and is indicated at 62, a specific description of this feature of the device being unnecessary, since the same, specifically considered, forms no part of the present invention.

The invention further includes a steering element which is journaled in the body 24 for rotation on a fixed axis, meaning thereby that the steering element rotates in the body, but does not have a swinging or lateral movement, independent of the movement of the body.

The steering element is a composite structure and includes a shaft 21 mounted to rotate in the body 24, as will be understood best from Fig. 2. Secured to the upper end of the shaft 21 is a handle bar 22. In the lower face of the body 24 there is formed a recess 25. Secured to the body 24 at the upper end of the recess 25 is a thrust plate 27 through which the shaft 21 passes. A collar 26 is secured to the shaft 21 and is adapted to rotate along with the shaft 21 in the body 24, the collar 26 being located above the thrust plate 27.

The steering element and the wheel carrying member, both of which have been described hereinbefore, are provided with slidably interfitting parts interengaged for simultaneous rotation and for relative tilting movement. One of these slidably interfitting parts is represented by rectangularly disposed wings 28 formed upon the lower end of the shaft 21. These wings 28 may be

described as a polygonal portion of the shaft 21, or, under a slightly different phraseology, the wings 28 may be referred to as the cruciform end of the shaft 21. The other of the slidably interfitting parts, to-wit, the part of the wheel carrying member under discussion, is represented by the top plate 15 of the head 14, the top plate being provided with rectangularly disposed, intersecting slots 19 and 20. In these slots 19 and 20, the wings 26 are loosely received. The slots 19 and 20 constitute a polygonal opening in the wheel carrying member and considered more specifically, this opening is of cruciform outline.

Journaled for rotation in the rear, lower end of the support 21 is an axle or shaft 29, carrying rear wheels 30. A means is provided for rocking the body 24 upon the support 61, and this means includes a crank 29^a formed in the axle or shaft 29, there being a pitman 31 forming an operative connection between the shaft 29^a and the body 24.

In practical operation, when the wheel 10 is rotated by means of the pedals 11, the structure will be advanced along the ground. When the rear wheels 30 are rotated by contact with the ground, the shaft 29 will be rotated in the support 21 and, through the medium of the crank 29^a and the pitman 31, a rocking movement will be imparted to the body 24, the latter tilting upon its pivotal connection 60 with the support 61.

Owing to the fact that the thrust plate 27 is secured to the body 24, owing to the fact that the collar 26 is located above the thrust plate, and owing to the fact that the wings 28 are located below the thrust plate, the shaft 21 which constitutes a part of the steering element, does not slide vertically in the body 24 when the latter is tilted or rocked. The wings 28, however, which are formed upon the lower end of the shaft 21 fit loosely in the slots 19—20 of the head 14 which constitutes a part of the steering member, and therefore it will be seen that the body 24 may be tilted, without breaking the operative connection between the steering element and the wheel carrying member. Therefore, while the body 24 is being tilted, in the manner hereinbefore set forth, a lateral, steering movement may be imparted to the forward wheel 10 through the following train of elements: the handle bar 22, the shaft 21, the wings 28, the head 14 (having intersecting slots 19—20 which receive the wings 28) and the forks 12.

What is claimed is:—

1. In a toy of the wheel-mounted hobby-horse type, a support; a body pivoted to the support; a wheel-carrying member journaled on the support; a steering element journaled in the body for rotation on a fixed axis; and slidably interfitting parts upon the steering element and upon the wheel-carrying member interengaged for simultaneous rotation and for relative tilting movement.

2. In a toy of the wheel-mounted-hobby horse type, a support; a body pivoted to the support; a wheel-carrying member journaled on the support; a steering element journaled in the body for rotation on a fixed axis; slidably interfitting parts upon the steering element and upon the wheel-carrying member interengaged for simultaneous rotation and for relative tilting movement; and means for rocking the body upon the support.

3. In a toy of the wheel-mounted hobby-horse type, a support; a body pivoted to the support; coöperating parts comprising a wheel-carrying member journaled on the support and a steering element journaled in the body, one of which coöperating parts is provided with a polygonal opening, the other of which coöperating parts is provided with a polygonal portion registering against rotation in the opening and for sliding and for tilting movement therein.

4. In a toy of the wheel-mounted hobby-horse type, a support; a body pivoted to the support; a wheel-carrying member journaled on the support and provided with a polygonal opening; and a shaft journaled in the body, the shaft having a polygonal end registering against rotation in the opening and engaged in the opening for sliding and for tilting movement.

5. In a toy of the wheel-mounted hobby-horse type, a support; a body pivoted to the support; a wheel-carrying member journaled in the body; and a shaft journaled in the body, the shaft having a cruciform end and the wheel carrying member having a cruciform slot in which the cruciform end is loosely received.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

ALBERT W. SWENDER.

Witnesses:
ETHEL M. WIGGER,
HUBERT W. SWENDER.