R. A. MACK,

COASTER.

APPLICATION FILED OCT. 27, 1920.

1,425,880. Patented Aug. 15, 1922.

Fig. 1.

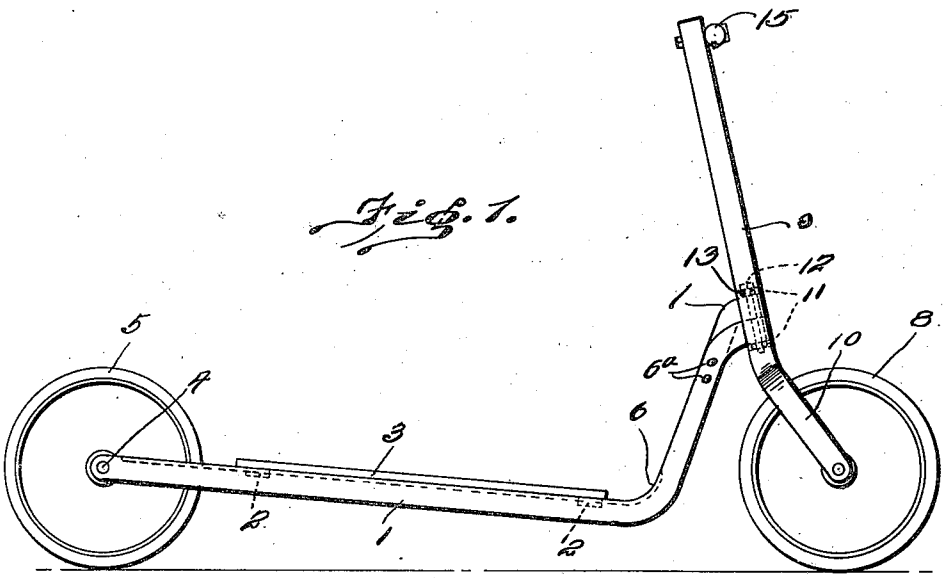


Fig. 2.

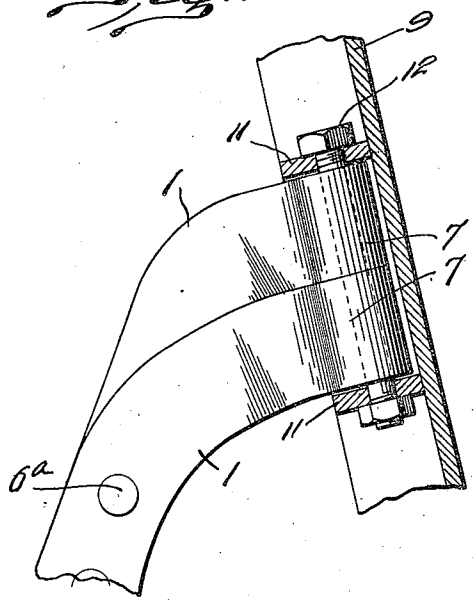
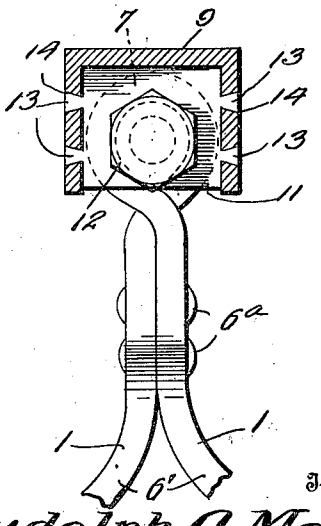


Fig. 3.



Witness:

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UNITED STATES PATENT OFFICE.

RUDOLPH A. MACK, OF GALLIPOLIS, OHIO.

COASTER.

1,425,880. Specification of Letters Patent. Patented Aug. 15, 1922.

Original application filed June 26, 1919, Serial No. 306,941. Divided and this application filed October 27, 1920. Serial No. 419,887.

To all whom it may concern:

Be it known that I, RUDOLPH A. MACK, a citizen of the United States, residing at Gallipolis, in the county of Gallia and State of Ohio, have invented new and useful Improvements in Coasters, of which the following is a specification.

This invention relates to toy vehicles, and particularly to "coasters", and its object is to provide a simple, strong and durable device of this character wherein special provision is made for supporting the steering post to render the construction firm and secure at the pivot joint and to allow free and easy movements of the steering wheel.

The present application is a division of my prior application filed June 26, 1919, Serial No. 306,941.

The invention consists of the features of construction, combination and arrangement of parts, hereinafter fully described and claimed, reference being had to the accompanying drawing, in which:—

Figure 1 is a side elevation of the coaster.

Figure 2 is a vertical section through the steering joint.

Figure 3 is a horizontal transverse section thereof.

In the practical embodiment of my invention I provide a coaster comprising a frame consisting of a pair of longitudinal frame bars 1 and any desired number of tie plates 2. The bars 1 are in the form of angle bars, as shown, which are arranged in spaced relation and support the platform board 3 suitably fastened to the upper horizontal webs or flanges of the angle iron bars between the ends thereof.

The rear ends of the bars are provided with or carry suitable bearings for a transverse shaft or axle 4 on which is mounted the rear supporting wheel 5. At a point in advance of the forward edge of the board or plate 3 the bars 1 are bent upward and forward at an obtuse angle, as indicated at 6, and have their terminal forward portions bent upward and forward and inwardly toward each other or convergently, as at 6'. From this point forward the bars lie in parallel and abutting relation and are riveted or otherwise fastened together, as at 6^a. Finally the ends of the bars terminate in superposed and crossed relation and are provided with superposed pivot knuckles or eyes 7.

Arranged in advance of the angularly bent forward portions of the bars 1 is a front supporting and steering wheel 8. This wheel 8 is journaled upon an upright steering post 9, comprising a channel iron split at its lower ends and having its divisions formed to provide the downwardly and forwardly bent fork arms 10 in which the axle of the wheel 8 is journaled or by which said axle is supported. Apertured plates 11 are fitted in the channel of the post 9 and the knuckles 7 are received therein between said plates, a bolt 12 passing through said plates and knuckles and pivotally connecting the post with the frame. The plates 11 preferably have projections 13 which are riveted in openings 14 in the sides of the posts, whereby said plates are secured in position. At its upper end the steering post is provided with hand grips or handle bars 15.

It will be understood that this vehicle is operated by placing one foot upon the board or platform 3 and pushing with the other, while the vehicle is held and steered by the hands of the operator gripping the handle bars 15, which may be manipulated to turn the steering wheel 8 to the right or left. It will be observed that by the described arrangement of the portions 6 and 7 of the bars 1, the body portions of the bars supporting the platform 3 are arranged at a desirable slight downward and forward angle of inclination, while ample space is provided between the steering wheel 8 and the bent portion of the bars for the free and easy movements of said steering wheel and the steering post. Also it will be seen that the described construction of the post and pivot connection provides for a desirable rearward inclination of the upper portion of the steering post and forward projection of the fork members 10 thereof to properly space the wheel 8 from the forward portion of the frame for the purpose described. Furthermore, the described form of the post 9, and its mode of pivotal connection with the frame bars, provides a simple construction of connection at the point of junction of the frame and steering post, by means of which the stresses and strains to which these parts are subjected at the pivot connection are effectually sustained and liability of fracture of the pivot connections prevented.

It will, of course, be understood that any suitable means other than the tie plates 2 may be employed in connection with the rear axle and fastenings 6^a to hold the frame bars 1 firmly and rigidly connected.

Having thus fully described my invention, I claim:

1. A coaster including a pair of frame bars having upwardly and forwardly angular bent ends provided with knuckles, a rear supporting wheel carried by the frame bars, a channeled steering post to receive and wholly enclose said knuckles, a steering wheel on said post, and a pivot bolt connecting said post and knuckles.

2. In a steering connection for coasters, a post having an opening therein, spaced bearing members in said post, bars, knuckles carried by said bars and alined with each other, the combined lengths of said knuckles being substantially equal to the distance between said bearing members, and a pivot pin carried by said bearing members and passing through said knuckles.

3. In a coaster, a hollow steering post open at its rear, bearing plates held within said post and spaced parallel to each other, a frame including bars having their forward ends brought together and fastened, knuckles formed in the forward extremities of said bars, said knuckles being alined with each other and their combined length being substantially equal to the distance between said plates, a pivot pin connecting said plates and extending through said knuckles, the said knuckles being wholly confined in said post.

In testimony whereof I affix my signature.

RUDOLPH A. MACK.