No. 779,606. PATENTED JAN. 10, 1905.

H. E. KEYES.

COASTING WAGON.

APPLICATION FILED SEPT. 22, 1902.

Fig. 1.

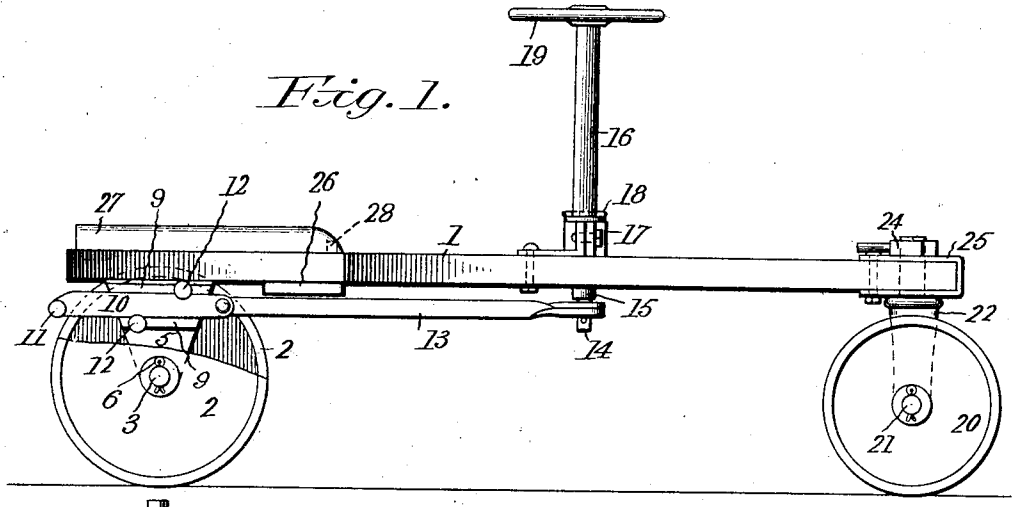


Fig. 2.

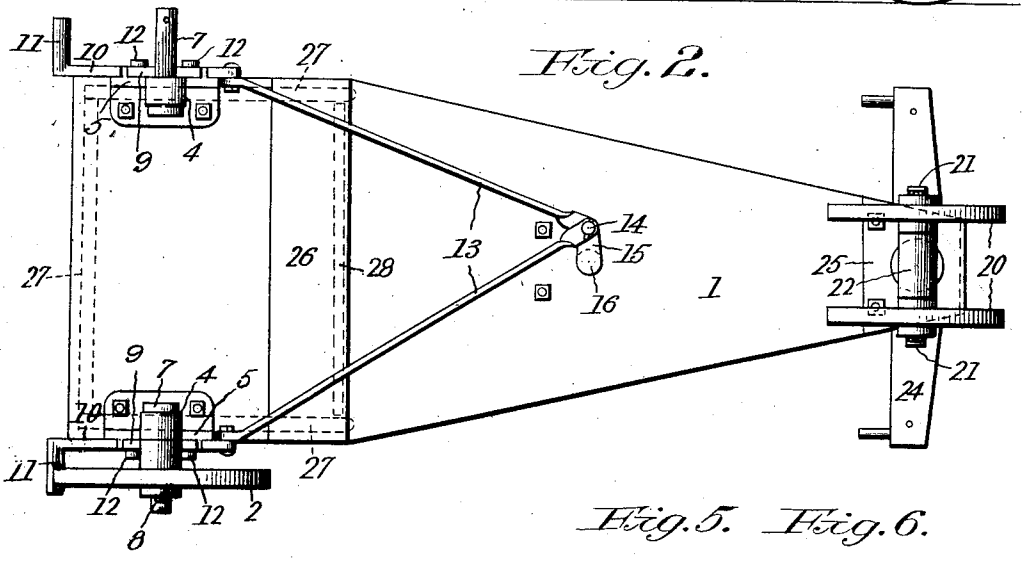


Fig. 5. Fig. 6.

Fig. 3.

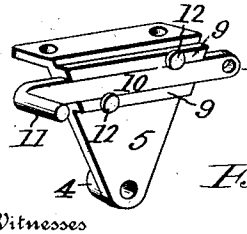


Fig. 4.

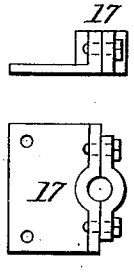
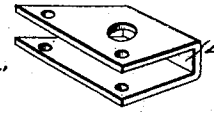
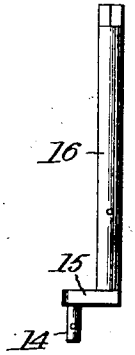
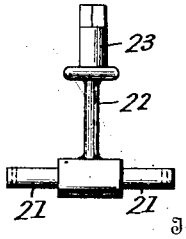


Fig. 7.







Witnesses

C. H. Walker.

E. A. Simonel.

Inventor

Harry E. Keyes

by Wm. N. Finnell

Attorney

No. 779,606. Patented January 10, 1905.

UNITED STATES PATENT OFFICE.

HARRY E. KEYES, OF HOMESTEAD, PENNSYLVANIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO GRAVITY COASTER & MANUFACTURING COMPANY, OF HOMESTEAD, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

COASTING-WAGON.

SPECIFICATION forming part of Letters Patent No. 779,606, dated January 10, 1905.

Application filed September 22, 1902. Serial No. 124,357.

To all whom it may concern:

Be it known that I, HARRY E. KEYES, a citizen of the United States, residing at Homestead, in the county of Allegheny and State of Pennsylvania, have invented a certain new and useful Improvement in Coasting-Wagons, (Case C,) of which the following is a full, clear, and exact description.

The object of this invention is to provide a wagon or truck for amusement purposes in coasting down hills or other inclines natural or artificial.

In a concurrent case filed February 5, 1902, Serial No. 92,658, (patented October 14, 1902, No. 711,402,) I have set forth one embodiment of the principle of the invention, and in another case of even date herewith, Serial No. 124,356, another embodiment thereof is set forth.

In the present invention the brake mechanism includes longitudinally-sliding brake-shoes mounted upon the wheel-supporting brackets and a brake-mast made as a crank-shaft and mounted upon the body and connected with the brake-shoes to actuate them positively in applying and releasing them. The steering-gear includes a wheel bracket or post having a pair of wheels. The front end of the body is provided with a shoe fitted to embrace the top, end, and bottom of the body in order to reinforce it and provide a bearing for the steering-gear bracket or post, all as I will proceed now more particularly to set forth and finally claim.

In the accompanying drawings, illustrating my invention, in the several figures of which like parts are similarly designated, Figure 1 is a side elevation with the near wheel broken out. Fig. 2 is a bottom plan view, but including individual stub-shafts instead of an axle for the rear wheels and the near wheel removed. Fig. 3 is a perspective view of one of the rear-wheel brackets with the brake-shoe in position. Fig. 4 shows in side elevation and plan the brake-mast bearing. Fig. 5 is a side elevation of the brake-mast. Fig. 6 is a front elevation of the steering-gear post. Fig. 7 is a perspective view of the front shoe.

The combined body and seat 1 may be made of a flat board or piece of lumber of any suitable kind and thickness or of other material and in the form of a truncated wedge, substantially as seen in Fig. 2. The rear wheels 2 2 are mounted upon an axle 3, carried in bearings 4 in brackets 5, which are bolted to the body. Cotter-pins 6 may be used to secure the wheels to the axle. Instead of using a continuous axle 3, as indicated in Fig. 1, I may use a stub-shaft 7 for each wheel, and these stub-shafts may be rivets mounted in the bearings 4 and connected with the wheels by cotter-pins 8 or other fastenings, as in Fig. 2.

The brackets 5 are made with parallel ribs 9, in which are placed the brake-shoes 10, made as bars having one of their ends 11 turned out at right angles, so as to stand across the rims of the wheels. These brake-shoes are held in place between the ribs by rivets or other headed devices 12 overlapping them, and they are assembled so as to have perfect freedom of movement in the direction of their length and so as to be readily applied to the wheel-rims and released therefrom. By using solid or unslotted brake-shoes their strength is preserved as compared with slotted shoes and they rattle little, if any. The brake-shoes are connected by rods 13 with the pin 14 on the cranked end 15 of a shaft or brake-mast 16. This mast is mounted upon the body in any suitable housing or box 17 (see details Figs. 1 and 4) and may be secured therein by a cotter-pin 18 or other device. The housing or box is such as to admit of the free turning of the mast, and for turning or operating purposes said mast may have a hand-wheel 19 or other device sufficient to that end and which will afford a good hold for the user. The housing is bolted or riveted to the body and is made of separable parts, substantially as indicated; but the invention is not limited to any particular kind of brake-actuating mechanism.

It is desirable on some roads to have a broader bearing in front than is afforded by a single steering-wheel, and in such case I may use a pair of steering-wheels 20, mounted upon laterally-extending stub-axles 21 on a bracket or post 22. This post has a collared shank 23, fitted in a suitable bearing in the forward end of the body and supplied with a combined foot-rest and steering-bar 24, secured thereto by a squared joint, as indicated, or otherwise.

In order to reinforce the front and narrow end of the body, it is shod with a metal loop or clip 25, which embraces the top, bottom, and front of said body, is riveted or bolted thereto, and is provided with openings and forms bearings or bushings or wear-plates, any or all, for the steering-gear and as well strengthens the body and renders it less liable to damage from the strains and stress of use. One or more battens 26 may be applied to the body to resist cracking, warping, splitting, and generally to reinforce said body.

Upon the seat portion of the body 1 are secured three strips 27, projecting above the surface of said seat portion and preferably arranged at or near the side and rear edges of said seat portion, as shown in Figs. 1 and 2. These strips serve as guards for preventing the rider from slipping or sliding off the seat at the sides and rear, or, if desired, an additional strip 28 may be arranged transversely of the seat at the forward ends of the strips 27 (see dotted lines Fig. 2) for preventing the rider from slipping or sliding forward.

The parts are assembled by means which will permit of their ready disconnection, so that the wagon may be knocked down for transportation and storage purposes, and since the parts are interchangeable repairs may be readily and cheaply effected.

In operation the user straddles and sits upon the body at the rear and placing his feet upon the steering-bar and grasping the brake-mast gives a lunge forward, and so starts the wagon in motion, which is accelerated by momentum in descending an incline. The speed of the wagon is controllable by the brake mechanism, and guidance is easily effected by the steering-gear.

Parts of the invention herein set forth are applicable to either or both of the wagons of the other cases, and vice versa.

What I claim is—

1. A coasting-wagon, comprising essentially a body, steering-gear, rear wheels, brackets for said wheels, and brake mechanism including brake-shoes mounted in and to slide between ribs on said brackets, and means to actuate said shoes.

2. A coasting-wagon, comprising essentially a body, steering-gear, rear wheels, brackets for said wheels, and brake mechanism including brake-shoes made solid, the said brackets having parallel ribs in which said shoes are slidable, and headed rivets overlapping said shoes to hold them in place.

3. A coasting-wagon, comprising essentially a body, steering-gear, rear wheels, brackets for said wheels, and brake mechanism including brake-shoes mounted in said brackets and movable longitudinally between ribs on said brackets, and a cranked brake-mast connected with said brake-shoes and adapted to move them longitudinally in said brackets to apply and release the brake-shoes.

4. A coasting-wagon, comprising essentially a body, a pair of steering-wheels, a post having laterally-projecting journals upon which said wheels are secured and separated from each other, a combined foot-rest and steering-bar on said post, rear wheels, brackets for said rear wheels, and a brake mechanism substantially such as described for operation in connection with said rear wheels.

5. In a coasting-wagon, a truncated wedge-shaped board body having its forward tapering end shod with a metal shoe embracing the top, bottom and end of said board.

6. In a coasting-wagon, a board body having its forward end shod with a metal shoe embracing the top, bottom and end of said board, and provided with openings and forming a bearing for the steering-gear post.

7. In a coasting-wagon, a combined body and seat, and strips secured upon said seat at front, rear and sides to form a guard, whereby the rider is prevented from sliding off said seat in all directions.

In testimony whereof I have hereunto set my hand this 19th day of September, A. D. 1902.

HARRY E. KEYES.

Witnesses:
W. E. BLAIR,
WM. L. DILLON.