

Petent Request

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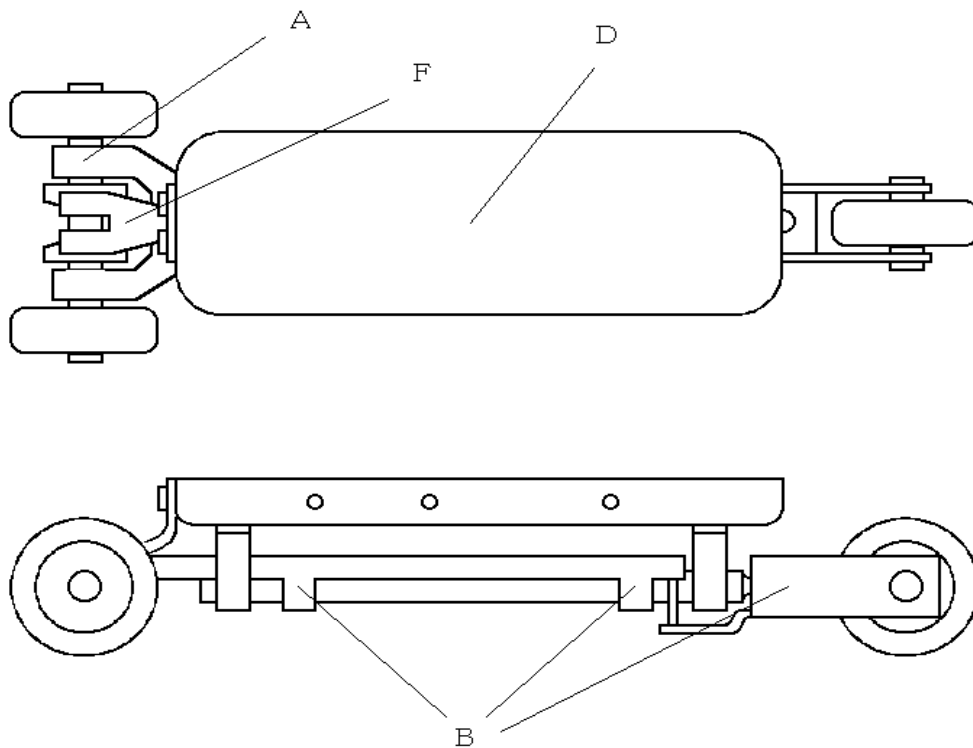
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Region of request

Roller skate of three wheels with two front wheels, that is structured with the rear wheel assumed where the angle is applied perpendicularly also horizontally to the traveling direction and the horizontal angle is related mechanically to the turn of the perpendicular rotation axis, moreover, with the brake plate installed at the front wheel common axis, at certain value of the fall of shoe-sole fixed to the perpendicular rotation axis, cause friction through a spring, so that the braking power may work against road surface



The specification

Title of the invention

3-Wheel Roller-Skate

Statement

This invention relates to roller skate with two front wheels and one rear wheel

Background

Roller skates are composed of four wheels in general, and as for the change in the direction of the advance, weight is done to one foot, stepping forward the other side in the direction of the movement.

The transfer of weight doesn't contribute enough to the change in the direction, even when the front and the rear wheel system mechanically are independent where the cushioning material exists between sole of a shoe, so then the physical fatigue become large.

Brief summary of the invention

As for the roller skate with two front wheels and one rear wheel, the rear wheel is assumed to be a structure that the angle is applicable to the traveling direction perpendicularly and horizontally, where the horizontal angle is fixed mechanically related to the turn of the perpendicular rotation axis.

Moreover, the brake plate installed at the front wheel common axis, at certain value of the fall of shoe-sole fixed to the perpendicular rotation axis, cause through a spring the friction so that the braking power may work against road surfacethe.

Due to this structur, the direction of the strike is changed smoothly by the movement of weight and doing of inclining the body, and it can enjoy the strike with a little tiredness.

Brief description

As for invention of roller skate with two front wheels and one rear wheel, the rear wheel that is assumed to be a structure that the angle is applied to the traveling direction perpendicularly and horizontally, where the horizontal angle is fixed mechanically related to the turn of the perpendicular rotation axis.

Moreover, the brake plate installed at the front wheel common axis, at certain value of the fall of shoe-sole fixed to the perpendicular rotation axis, cause through a spring the friction so that the braking power may work against road surface.

Due to this structure, the direction of the strike is changed smoothly by the movement of weight and doing of inclining the body, and it can enjoy the strike with a little tiredness.

Moreover, the braking power to the strike can be obtained by greatly falling down.

One execution form of this invention is shown in Figure-1.

Detailed description

In Figure-1, Symbol-A indicates the ball bearing and B indicates the thrust bearing, where they are clung to frame C or axis shaft.

Symbol-D is the patten which locked with the perpendicular rotation axis. Therefore the rear wheel, as known with Figure-2, falls along with the rotation of the perpendicular rotation axis, and the neck of wheel will be shaken accordingly because of thrust bearing.

However, the angle of the neck is bound in a relation by power from wire-rope E connected with the frame C.

For instance, the rear wheel is twisted clockwise when the player knocks down the body to the left, and the back of skate results in surrounding to the right.

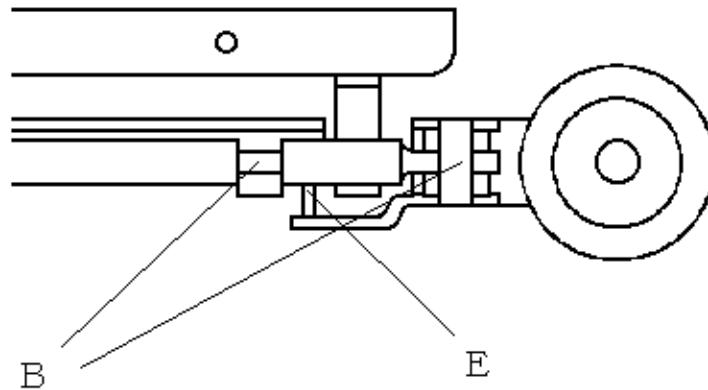


Figure-3 shows the mechanism how to obtain the brake-power.
 When greatly falling, the brake shoe F scratches the disk on axis of the
 joined front wheel, and the braking power may work against road surface
 along with turning power.

Expranation to Figure

Figure-1 :
 Ground view and elevational view of three wheels roller skate

Figure-2 :
 Cross section of the rear wheel and thrust bearing
 Symbol-D is the patten fixed to the perpendicular rotation axis.
 Wire-ropc E on the former edge of rear wheel department is connected
 with frame C.

Figure-3 :
 Cross section of the center of the front wheel related to brake shoe
 Bearings for the front wheels and a perpendicular thrust bearing are placed
 in frame C.

Figure-1

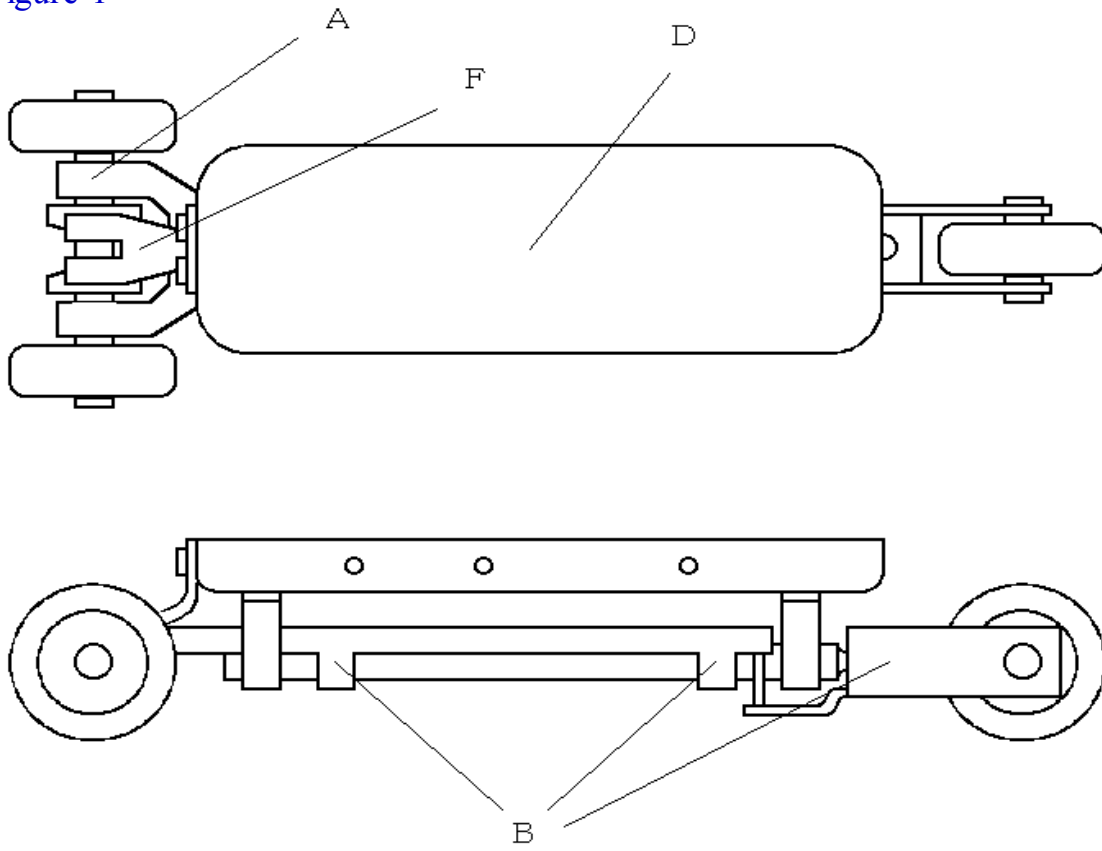


Figure-2

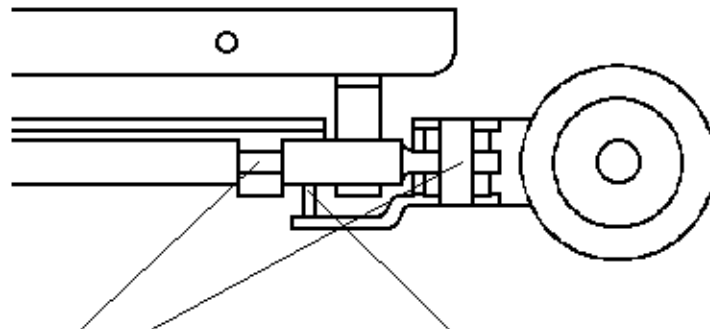
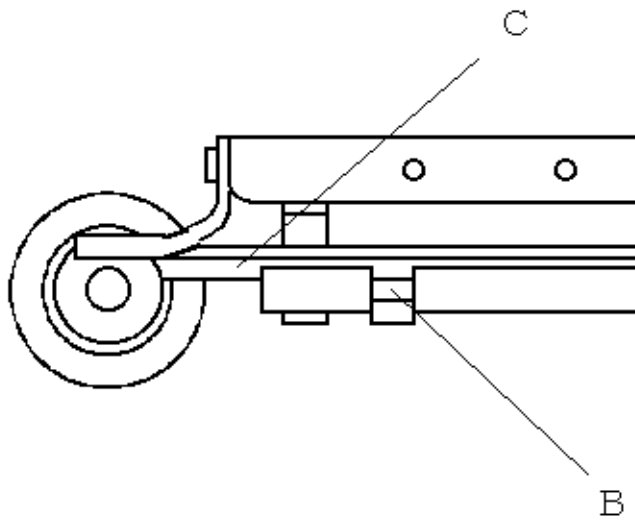


Figure-3



Abstract of the disclosure

Roller skate are composed of four wheels in general, and as for the change in the direction of the advance, weight is done to one foot, stepping forward the other side in the direction of the movement.

Therefore it doesn't contribute enough to the change in the direction, even when the front and the rear wheel system mechanically are independent where the cushioning material exists between sole of a shoe, so then the physical fatigue become large.

In this invention of roller skate of three wheels with two front wheels, the rear wheel is assumed to be a structure that the angle is applied to the traveling direction perpendicularly and horizontally to the traveling direction, where the horizontal angle is fixed mechanically related to the turn of the perpendicular rotation axis.

Besides, the brake plate installed at the front wheel common axis, at certain value of the fall of shoe-sole fixed to the perpendicular rotation axis, cause through a spring the friction so that the braking power may work against road surfacethe.

Due to this structur, the direction of the strike is changed smoothly by the movement of weight and doing of inclining the body, and it can enjoy the strike with a little tiredness.

And also, the braking power to the strike can be obtained by greatly alling down.

One execution form of this invention is shown in Figure-1.