

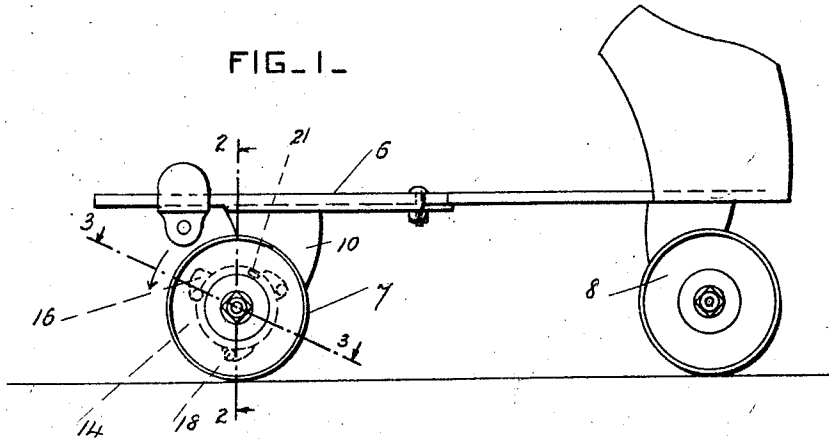
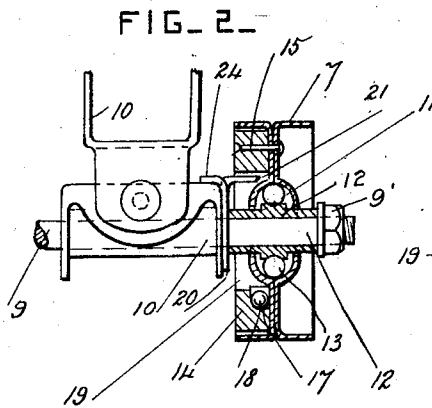
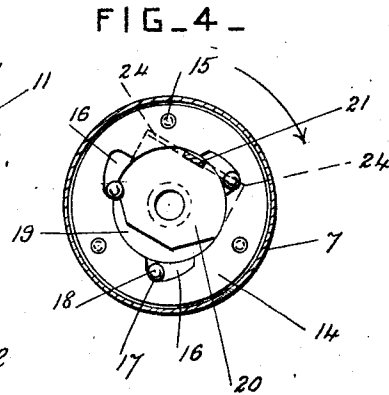
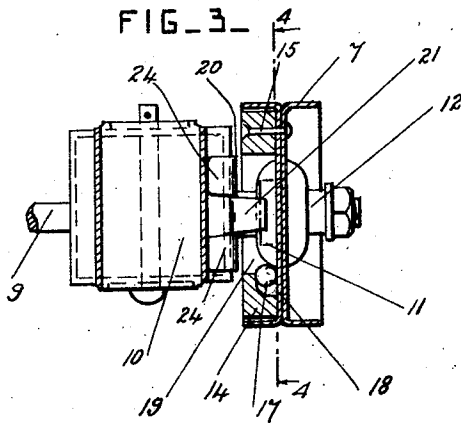
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R. M. KENNEY

ROLLER SKATE

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UNITED STATES PATENT OFFICE.

RICHARD MOORE KENNEY, OF WICHITA, KANSAS.

ROLLER SKATE.

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To all whom it may concern:

Be it known that I, RICHARD M. KENNEY, a citizen of the United States, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Roller Skates, of which the following is a specification.

This invention relates to roller skates specially adapted for safe and rapid forward skating on sidewalks; and it consists in the novel construction and combination of the parts hereinafter fully described and claimed whereby the skates are prevented from slipping backwardly from under the skater.

In the drawings, Figure 1 is a side elevational view of a skate constructed according to this invention. Fig. 2 is a vertical sectional view taken through one of the front rollers on the line 2—2 in Fig. 1, and showing also parts of the supporting frame and axle, and is drawn to a larger scale. Fig. 3 is a horizontal sectional view taken through the front roller on the line 3—3 in Fig. 1, and showing also portions of the frame and axle. Fig. 4 is a detail side view of the inner face of the check block, showing also the rim of the roller and the stop tang in section on the line 4—4 in Fig. 3. Fig. 5 is a section through the lower part of the roller bearing, taken on the line 5—5 in Fig. 4.

The skate has a foot plate 6 which is mounted on front rollers 7 and rear rollers 8 in the usual manner. The front rollers have an axle 9 which is secured in a frame 10 which is secured to the foot plate. The front rollers 7 are provided with stop mechanism to allow the skate to run freely forward, but which prevent it from running backward. This is a great advantage in sidewalk skating, where rapid progress in a forward direction is desirable, as it makes it unnecessary to throw side pressure on the rollers in order to speed forward.

Each roller is made of two cup-shaped sections secured together and provided with a hub 11. Each hub is mounted on an anti-friction bearing of approved construction having a sleeve 12 which is clamped on the axle 9 in any approved way. Similar nuts 9' in the ends of the axle 9 clamp the sleeves 12 against the washers 20 and frame 10,

and permit the rollers to revolve freely on the balls 13 of the antifriction bearings, as shown in Fig. 2.

An annular check block 14 is provided, and is secured in the inside portion of each front roller by rivets 15. This check block has cavities 16 formed in its inner side. These cavities are deeper at one end than at the other and their deep ends 17 are substantially semicircular. Balls 18 are arranged in these cavities, and when in their larger ends they do not project over the circular center opening 19 of the annular block. The balls are retained in the blocks 14 by the hubs 11. The cup-shaped section of the roller 7 which has the check block 14 secured in it has its hub 11 formed integral with its web or bottom portion, and this hub projects into the cylindrical center opening 19 of the block 14 partially over the cavities 16 and prevents the balls from leaving the cavities altogether.

A washer 20 is arranged on the axle between the frame and the roller, and it has a lateral stop member 21 on one side which projects into the opening 19 crosswise of the cavities 16 and balls 18. The washer has tangs 24 which project in the opposite direction from the stop member, and engage with the frame so that the washer is prevented from revolving. Any other approved means may however be used which will prevent the stop member from revolving with the roller.

When the skate is running forwardly, and the roller 7 is being revolved in the direction of the curved arrow in Fig. 1, the balls 18 which move upwardly towards the stop 21 are in the larger ends of the cavities and they pass freely over the stop member 21, since if they strike against it they are merely thrust back into the larger ends of the cavities. The skate is prevented from running backwardly from under the skater, as any rearward motion of a roller revolves the roller in a direction which causes one of the balls to run into the shallow end of the cavity and engage with the stop member. When the roller 7 is being revolved in the direction of the curved arrow in Fig. 4, the balls 18 which move upwardly towards the stop 21 project from the shallow end portions of the cavities 16 into the opening 19

of the check block 14, so that the uppermost ball will strike against the stop member 21. The stop member presses the ball against the shallow end of the cavity, and the roller is thereby prevented from revolving in a direction for rearward motion and from slipping away from under the skater.

What I claim is:

1. In a roller skate, a frame, an axle secured in the frame, a roller mounted on the axle, an annular check block secured to the roller and provided at one side with cavities which are deeper at one end than at the other, balls arranged in the said cavities, and a non-revoluble stop member carried by the axle and projecting into the opening of the check block and operating to prevent the roller from being revolved in a direc-

tion for rearward travel by engagement with one of the balls.

2. A roller skate as set forth in claim 1, the said non-revoluble stop member comprising a washer mounted on the axle between the roller and the frame and having tangs which project in opposite directions and engage with the frame and with the balls.

3. A roller skate as set forth in claim 1, each of the rollers at the front end of the skate being provided with a similar and independent stop mechanism to prevent the skate from running backwardly.

In testimony whereof I have affixed my signature.

RICHARD MOORE KENNEY.