April 8, 1969 J. F. SHEVELSON 3,437,344

ROLLER SKATE

Filed April 7, 1967

Fig. 1.

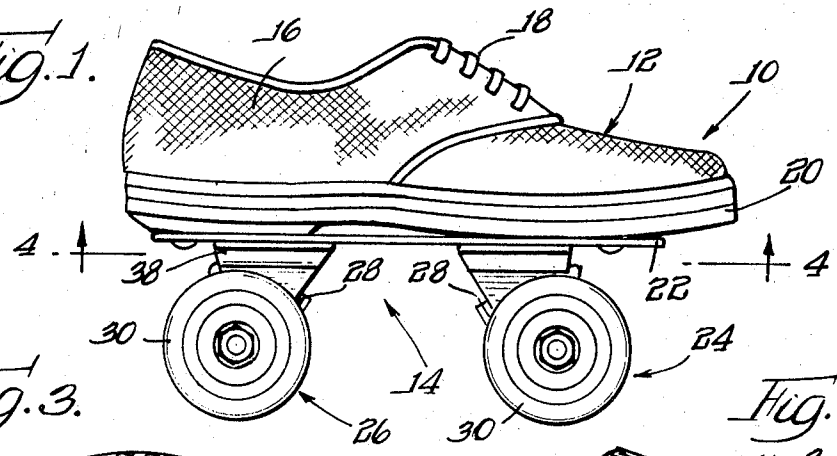


Fig. 3.

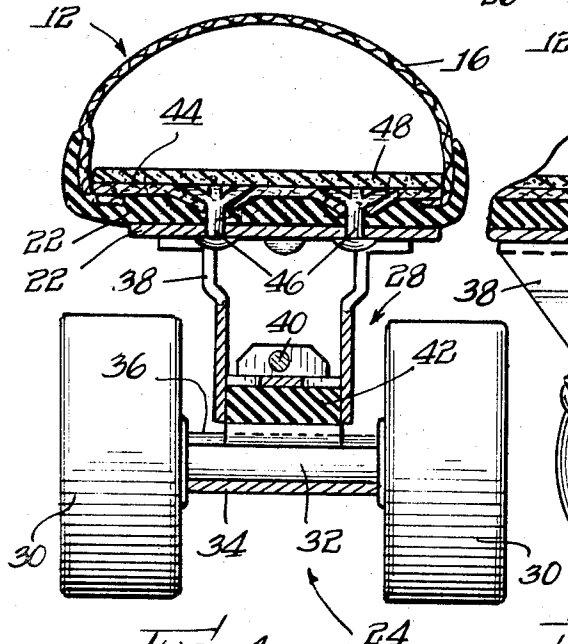


Fig. 2.

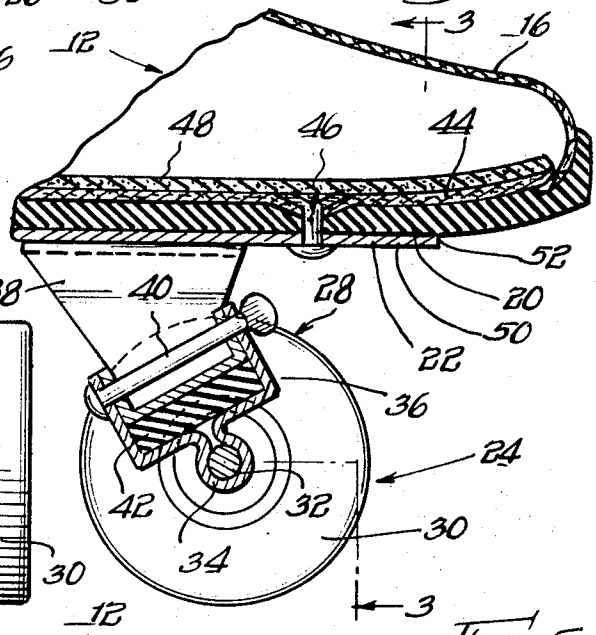


Fig. 4.

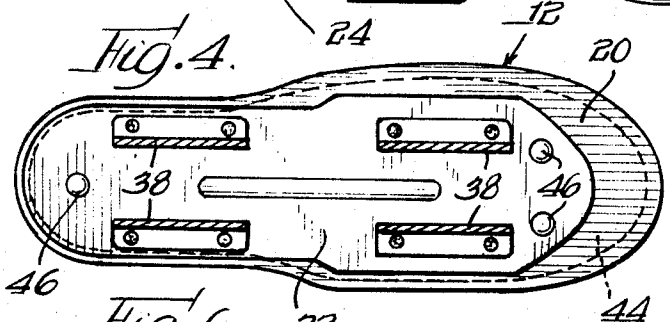


Fig. 5.

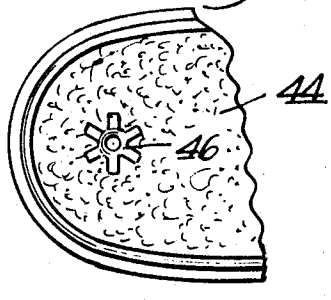
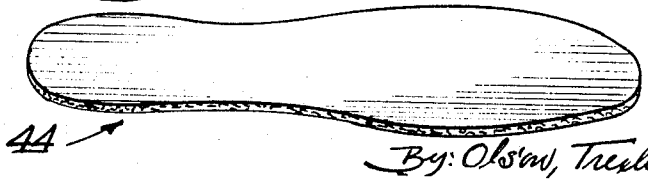


Fig. 6.



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United States Patent Office 3,437,344
Patented Apr. 8, 1969

3,437,344

ROLLER SKATE

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Filed Apr. 7, 1967, Ser. No. 629,201
Int. Cl. A63c 1/02
U.S. Cl. 280—11.2 5 Claims

ABSTRACT OF THE DISCLOSURE

A soft-shoed roller skate for street use in which the shoe has a padded sole confined between a wheeled platform and a mounting platen disposed within the shoe.

Rink roller skates are conventionally comprised of a high shoe or boot that is permanently mounted on a sole plate from which the wheel trucks depend. On the other hand, street skates are arranged for temporary attachment to ordinary street oxfords. The skating safety and control inherent in rink skates do not obtain in street skates because of the ever-present possibility of the shoes and skates becoming detached at the temporary mountings. This detachment hazard is especially acute in the case of small children whose sense of balance and protective reactions are not highly developed. This hazard is also especially pertinent in the latter situation because small children usually have only limited opportunities for participation in rink skating and hence are highly motivated toward street skating.

Therefore, an important object of the present invention is to provide a street skate construction in which the shoe portion is comfortably and securely attached to the wheeled platform.

Still another object of the invention is to provide a street skate construction in which the skater's foot is isolated from the vibrations normally associated with skating on concrete sidewalks and other coarse textured surfaces.

These and other objects and features of the invention will become more apparent from a consideration of the following descriptions.

In the drawing:

FIG. 1 is a side elevational view of a roller skate construction in compliance with the principles of the present invention;

FIG. 2 is an enlarged, fragmentary view taken in central cross-section through the skate of FIG. 1 and showing attachment of the shoe to the rollable skate carriage;

FIG. 3 is an elevational view taken substantially along the line 3—3 of FIG. 2;

FIG. 4 is a bottom plan view taken substantially along the line 4—4 of FIG. 1;

FIG. 5 is a fragmentary, somewhat enlarged top plan view taken from inside the shoe and showing the head of the attaching rivet by which the heel of the shoe is mounted to the sole plate of the skate carriage; and

FIG. 6 is a perspective view of the platen used in mounting the shoe to the skate carriage.

Referring now in detail to the drawing, specifically to FIG. 1, a roller skate indicated generally by the reference numeral **10** is shown to comprise a shoe **12** and a rollable skate carriage **14**. The shoe **12** includes an upper **16** which is conveniently fabricated from a soft material such as canvas fabric, upper **16** being arranged for snug attachment to the foot of a skater in conventional manner by means of a lace **18**. The shoe **12** also includes a sole **20** which is sewn, sewn and glued, vulcanized to or otherwise suitably joined to the upper **16**; and in compliance with the features of the present invention, the sole **20** is

fabricated of resilient material such as rubber in order that it may serve as a vibration damper.

The carriage **14** comprises a rigid sole plate **22**, conveniently fabricated from metal, fore and aft truck assemblies, identified respectively by the reference numerals **24** and **26**, and mounting units **28** for securing the truck assemblies to the sole plate.

Turning to FIGS. 2 and 3, the truck assembly **24** includes a pair of wheels **30** which are mounted on a shaft or axle **32**. The corresponding mounting unit **28** includes a sleeve **34** which journals the shaft **32**. The sleeve **34** is formed in a lower bracket **36**. An upper bracket **38** is welded or otherwise suitably affixed to the underside of sole plate **22**, and a headed pin **40** is employed in joining the lower bracket **36** to the upper bracket **38** by passing through aligned apertures in the respective brackets. A rectangular pad or bushing **42**, fabricated from an elastomeric or other tough, resilient material, is confined between the brackets **36** and **38** to limit swinging action of the lower bracket **36** relative to the upper bracket **38**. The bushing **42** also cooperates with the sole **20** in isolating the foot of the skater from the vibrations normally associated with skating on concrete sidewalks and other coarse textured surfaces. The wheels **30** are advantageously fabricated from rubber formulated to develop a moderately firm durometer rating. When the wheels **30** are so fabricated, skates, such as the skate **10** may be used indoors on tile or wood floors in addition to outdoor use.

Continuing with reference to FIGS. 2 and 3, and with supplemental reference to FIGS. 4–6, the shoe **12** is permanently attached to the sole plate **22** by means of a mounting platen **44** and a suitable number of fastener elements which penetrate the sole of the shoe and which fastenably engage the mounting platen and the sole plate to secure the shoe to the skate carriage **14**.

The mounting platen **44** is desirably fabricated from a comparatively stiff or rigid material which is, at the same time, relatively easy to perforate for seating of the fastener elements; and in this regard, vulcanized or otherwise suitably bonded fibrous materials have proved eminently useful. As to the cooperating fastener elements, split rivets **46** are preferred, although other types of fastener elements may also be employed. As is shown in FIGS. 4 and 6, the mounting platen is desirably contoured to fill the inside of the shoe overlying the sole **20**, thus forming a smooth, uninterrupted surface; and advantageously, a padded insole **48** is disposed on top of the platen **40**, as is shown in FIGS. 2 and 3, to insure comfort to the skater.

Considering FIG. 5, it is to be observed that the split portion of the rivet overlies the mounting platen **44** for a considerable extent, forming a broad head for secure attachment; and considering FIG. 5 in conjunction with FIG. 4, it is to be observed that, while two split rivets **46** are employed at the forward end of the skate, only a single such rivet is employed at the heel. The use of a low quarter shoe or oxford, such as the shoe **12**, does not tend to impose excessive twisting or lifting stress in the heel region. When such a shoe is employed, skating stresses are in part transferred to the flexible material of the shoe upper and are partly relieved by the foot of the skater moving somewhat relative to the heel of the shoe. For facility in manufacture, the sole plate **22**, the sole **20** of the shoe itself, and the mounting platen **44** are perforated in advance of insertion of the rivets **46**.

Returning to FIG. 2 for a description of a further feature of the invention, it is to be noted that the sole plate **22** includes an abbreviated fore portion **50** having a forward distal edge **52** located some distance rearward of the forward projection of the shoe sole **20**. Thus, a substantial forward portion of the sole **20** is exposed so that it may be employed as a toe stop.

The manner in which the present invention may be practiced and the purposes to which it may be put are evident from the foregoing descriptions.

The invention is claimed as follows:

1. A roller skate comprising: a rollable skate carriage including a rigid sole plate, fore and aft truck assemblies, and mounting means for securing said truck assemblies to said sole plate; low cut fabric shoe means including a thick sole of resilient material disposed on said sole plate and providing a vibration damper; a mounting platen within the said shoe means overlying said sole; and three fastener elements perforating said sole and fastenably engaging said platen and said sole plate to secure said shoe means to said carriage; two of said fastener elements being located toward the toe of the shoe and being offset from each other at opposite sides of a longitudinal central axis of the shoe, and the other of said elements being located toward the heel of the shoe and substantially intersecting said longitudinal axis.

2. A roller skate according to claim 1 wherein said sole projects beyond the distal edge of said plate adjacent said fore truck assembly whereby said sole provides a toe stop.

3. A roller skate according to claim 1 which further comprises a cushioning insole overlying said platen.

4. A roller skate according to claim 1 wherein said mounting means includes a resilient bushing for cooperation with said sole in providing a vibration damper.

5. A roller skate according to claim 1 wherein said fastener elements comprise rivets.

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U.S. Cl. X.R.

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