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ATTACHMENT FOR ROLLER SKATES

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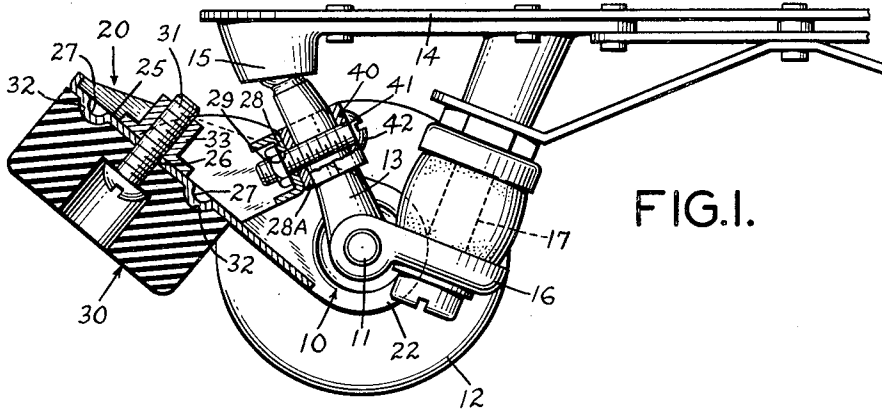


FIG. 1.

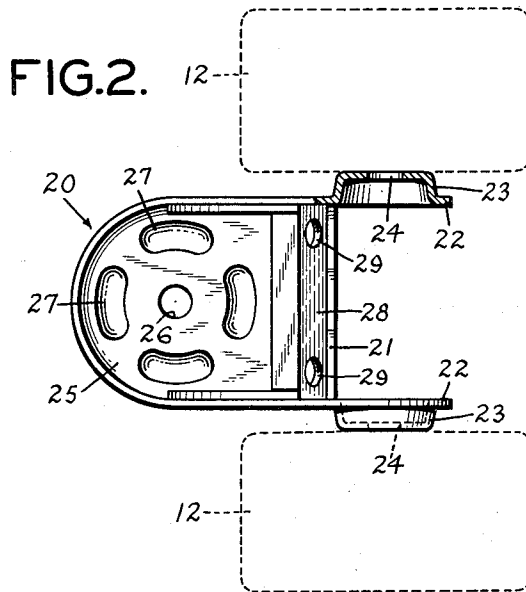


FIG. 2.

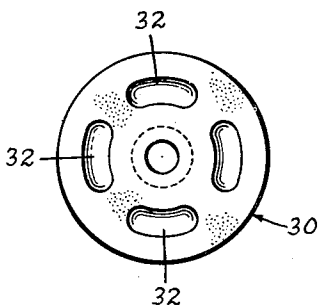


FIG. 3.

FIG. 4.

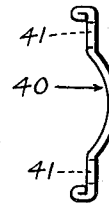
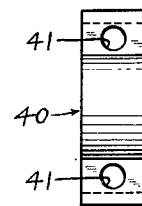


FIG. 5.



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ATTACHMENT FOR ROLLER SKATES

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6 Claims. (Cl. 280—11.2)

This invention relates to an attachment for roller skates and its object is to provide a simple and sturdy device which may be applied easily to skates of common construction to furnish such skates with floor engaging pads.

In an application for patent Serial No. 252,873 which I filed October 24, 1951, and which is co-pending herewith, I disclosed a floor pad on a roller skate and showed how such a pad could be attached to an already constructed skate. I have, since that application was filed, invented an improvement in the way of applying a foot pad to a skate and made other improvements which I will describe in the following specification and the novel features of which I will point out in claims.

Referring to the drawings

Fig. 1 is a side elevation of a roller assembly with one of its rollers removed, on a part of the footplate of a skate of well-known construction, and an attachment which is made according to and embodies my invention, shown in section applied to this roller assembly;

Fig. 2 is a plan view, a part of which is shown in section of a bracket which forms a part of the device. The relative position of the rollers is shown in this figure in dotted lines;

Fig. 3 is a top plan view of a resilient pad which in Fig. 1 is shown affixed to the bracket;

Fig. 4 is a side elevation; and

Fig. 5 is a plan view of a clamping piece.

The roller assembly comprises an axle bracket 10 in which the axle 11 on which are the rollers 12, is supported. A truck arm 13 extends diagonally from the axle to the footplate 14 of the skate. The upper part of the truck arm is connected to the footplate by a universal joint at 15. The axle bracket also has a longitudinally extending arm 16 through which a kingpin 17 passes which extends upwardly toward the footplate to which it is connected at a point longitudinally spaced from the connection between the truck arm with the footplate.

20 is a bracket which has a flat portion 21, from the opposite sides of which arms 22, 22 normal to the flat portion extend rearwardly. Near the free ends of these arms bosses 23 are formed which are perforated at 24 to receive the axle 11.

The forward part 25 of the flat portion is semi-circular with an axial perforation 26. 27 designates a plurality of circumferentially disposed angularly arranged depressions in the part 25 of the bracket which form projections below its lower surface. 28 is a transverse bridge, the ends of which are connected to the arms 22. In it are two internally threaded laterally spaced perforations 29.

30 is a cylindrical pad of synthetic rubber or similar material. It is made with two axial bores of different diameters which form a shoulder between them. 31 is a screw in these bores which projects beyond the upper end of the pad. 32 designates a plurality of depressions formed in the upper surface of the pad positioned to register with the projections 27 on the bracket. The pad is connected to the bracket by passing the screw 31 through the perforation 26 and applying a nut 33. If desired this nut may be welded to the bracket.

40 is a clamping piece having a pair of holes 41 spaced to correspond to the perforations 29 in the bridge 28.

In applying this attachment to a roller assembly the axle 11 is removed and the arms 22, 22 of the bracket 20 are placed over the axle bracket 10 with the perforations 24 in alignment with the bore for the axle. Then the axle is replaced and the bracket 20 rotated until its transverse bridge 28 abuts one side of the truck arm 13.

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In Fig. 1 a shim 28A is shown interposed between the bridge 28 and the truck arm 13, the purpose of which will be described later.

Now the clamping piece 40 is placed over the other side of the truck arm and fastened to the bridge 28 by screws 42.

If an edge of the pad becomes unduly worn, the pad may be adjusted rotatively by first loosening the screw 31. In the particular form shown, provision is made for holding the pads against rotation when the screw 31 is tightened, in four different positions.

The distance of the pad from the floor may be adjusted by inserting a shim 28A of desired thickness between the bridge 28 and the truck arm.

These attachments may be put on either or both ends of a skate. They are easily applied and a skater may put them on his own skates and thus avoid the expense involved in purchasing specially constructed toe-pad skates. They may be as easily removed.

Various modifications in construction, mode of operation, method and uses of an invention may and do occur to others, especially after benefitting from knowledge of such disclosures as that herein presented of the principles involved, but the invention itself is not confined to the present showing.

I claim:

1. A skate having a footplate, a roller assembly which comprises an axle, an axle bracket provided with a truck arm extending diagonally from the axle toward the footplate, a bracket having spaced arms provided with perforations through which the axle passes and a portion normal to said arms, a pad secured to said portion, a transverse bridge secured to the bracket on one side of the truck arm, and a clamping piece on the other side of the truck arm secured to said bridge.

2. A skate having a footplate, a roller assembly which comprises an axle, an axle bracket provided with a truck arm extending diagonally from the axle toward the footplate, a bracket having spaced arms provided with perforations through which the axle passes and a portion normal to said arms, a centrally disposed pad secured to said portion in an oblique position in relation to the footplate and longitudinally spaced from the axle, a transverse bridge secured to the bracket on one side of the truck arm, and a clamping piece on the other side of the truck arm secured to said bridge.

3. A skate having a footplate, a roller assembly which comprises an axle, a pair of laterally spaced rollers on the axle, an axle bracket provided with a truck arm extending diagonally from the axle toward the footplate, a bracket having spaced arms provided with perforations through which the axle passes and a flat portion normal to said arms, a truncated cylindrical pad axially secured to said portion, laterally positioned midway between the rollers, having a lower surface positioned obliquely in relation to the footplate above the lower periphery of the rollers and longitudinally spaced from the axle, a transverse bridge secured to the bracket on one side of the truck arm, and a clamping piece on the other side of the truck arm secured to said bridge.

4. A skate having a footplate, a roller assembly which comprises an axle, a pair of laterally spaced rollers on the axle, an axle bracket provided with a truck arm extending diagonally from the axle toward the footplate, a bracket having spaced arms provided with perforations through which the axle passes and a flat portion normal to said arms, a truncated cylindrical pad axially secured to said portion, laterally positioned midway between the rollers, having a lower surface positioned obliquely in relation to the footplate above the lower periphery of the rollers and longitudinally spaced from the axle, a transverse bridge secured to the bracket on one side of the truck arm, a clamping piece on the other side of the truck arm secured to said bridge and means for holding the pad against rotation on the bracket in different angular positions.

5. A skate having a footplate, a roller assembly which comprises an axle, a pair of laterally spaced rollers on the axle, an axle bracket provided with a truck arm extending diagonally from the axle toward the footplate, a bracket having spaced arms provided with perforations through which the axle passes and a flat portion normal to said

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arms, a truncated cylindrical pad axially secured to said portion, laterally positioned midway between the rollers, having a lower surface positioned obliquely in relation to the footplate above the lower periphery of the rollers and longitudinally spaced from the axle, a transverse bridge secured to the bracket on one side of the truck arm, a clamping piece on the other side of the truck arm secured to said bridge, and circumferentially spaced inter-fitting elements on the flat portion of the bracket and on the upper surface of the pad.

6. A skate having a footplate, a roller assembly which comprises an axle, a pair of laterally spaced rollers on the axle, an axle bracket provided with a truck arm extending diagonally from the axle toward the footplate, a bracket having spaced arms provided with perforations through which the axle passes and a flat portion normal to said arms, a truncated cylindrical pad axially secured to said portion, laterally positioned midway between the

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rollers, having a lower surface positioned obliquely in relation to the footplate above the lower periphery of the rollers and longitudinally spaced from the axle, a transverse bridge secured to the bracket on one side of the truck arm, a spacer interposed between the bridge and the truck arm and a clamping piece on the other side of the truck arm secured to said bridge.

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