

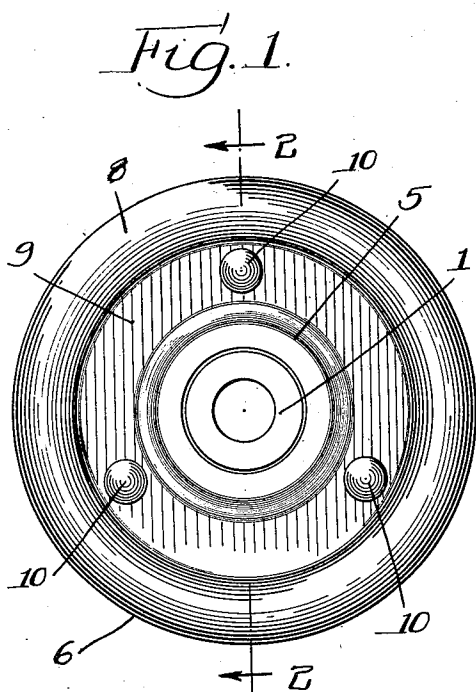
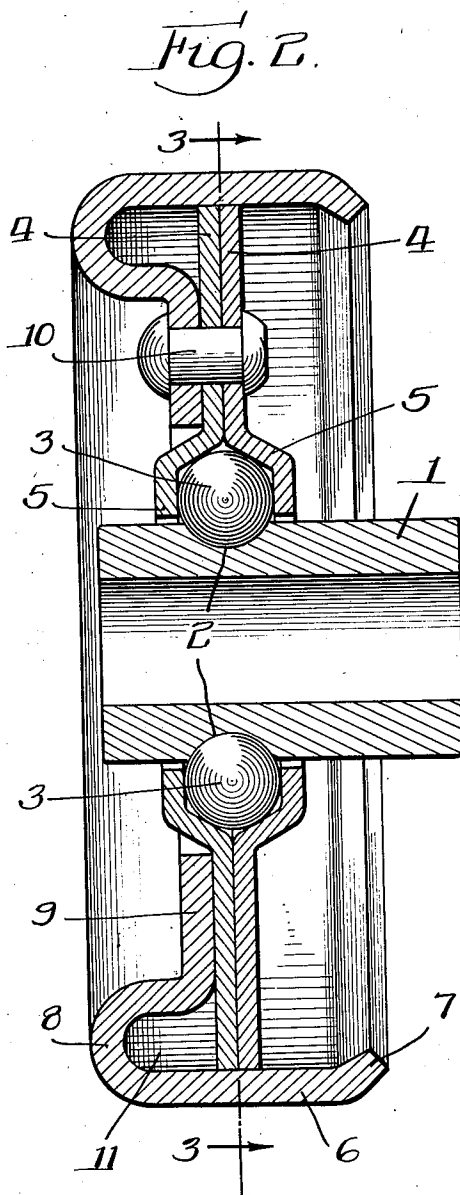
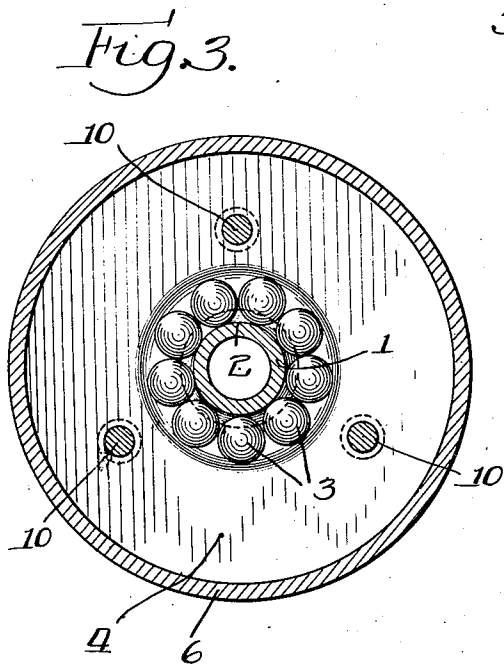
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SKATE ROLLER

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SKATE ROLLER

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8 Claims. (Cl. 208—181)

This invention relates to rollers for use on roller skates.

Generally stated, the object of the invention is to provide a novel and improved construction and arrangement whereby a skate roller is provided which is not only possessed of the requisite strength and rigidity, necessary for use on a roller skate, but which is also more simple in construction than those heretofore employed for this purpose, as well as of less weight, so that less metal is necessary, and whereby a consequent saving is effected in the manufacture of rollers of this kind.

It is also an object to provide certain details and features of construction and combinations tending to increase the general efficiency and desirability of a skate roller of this particular character.

To the foregoing and other useful ends, the invention consists in matters hereinafter set forth and claimed and shown in the accompanying drawing, in which—

Fig. 1 is a side elevation of a skate roller embodying the principles of the invention.

Fig. 2 is an enlarged vertical axial section on line 2—2 in Fig. 1 of the drawing.

Fig. 3 is a vertical transverse section, on a smaller scale, on line 3—3 in Fig. 2 of the drawing.

As thus illustrated, the invention comprises a solid metal hub 1, provided with a cylindrical surface having an annular groove or raceway 2 formed therein for the balls 3 that are provided to reduce friction between the roller and the hub. The body of the roller is formed by two side plates 4 that are provided with portions 5, which are bent apart to form the other raceway for said balls, as shown more clearly in Fig. 2 of the drawing. The annular tread section 6 has one edge turned in at 7, and has its other edge portion bent inwardly to form an annular bead 8 having a flat flange 9, which is fastened flatwise by rivets 10 to the body plates 4, previously described. The peripheral outer edges of the plates 4 preferably engage the inner surface of the tread section 6, as shown in Fig. 2 of the drawing.

Thus a strong and rigid roller is provided with practically a minimum of metal, so that the roller is not only lighter in use, but also cheaper to manufacture, than some rollers that have heretofore been used on skates. The plates 4 may be of less thickness than the tread section 6, as shown. The rounded bead 8 is on the outer side of the roller, and the latter thus presents an attractive appearance on the skate, for while the

roller is made of sheet metal, as shown, its outer side presents the appearance of solidity and rigidity that a solid roller might have.

It will be seen that the rounded portion 8 forms, in effect, a hollow annular bead on the outer side of the roller, with the interior 11 thereof unoccupied by any portion of the roller, and with the flangeless outer peripheries of the plates 4, the combined periphery of the two plates, sealing the interior 11 of this portion of the roller, but the construction shown and described is illustrative of one form of the invention, and the latter is not limited to the precise or exact construction shown and described, as the novel features of the invention, including the flangeless body plates, and the hollow annular bead, can be embodied in any suitable or desired construction without departing from the spirit of the invention.

It will be seen that the body of the roller, formed by the two plates 4 and 4, is entirely external of the interior 11 of the annular hollow bead 8, so that the latter contributes hollow strength with lightness and rigidity, whereby, while the roller can be made with less metal than heretofore employed in certain other rollers, it is nevertheless just as strong and durable.

What I claim as my invention is:

1. In a skate roller, disk-like side plates forming the body of the roller, secured flatwise together, having annular flangeless outer edges, but having their inner edge portions bent apart to accommodate anti-friction members, forming a ball race, and an annular tread section forming the outer periphery of the roller formed of one piece of sheet metal and flanged inside for flatwise engagement with one side of said body of the roller, a hub for engagement with said anti-friction members, said plates and tread section being rigidly fastened together at points between said ball race and the outer periphery of said plates.

2. A structure as specified in claim 1, said tread section being bent at the side to form an annular hollow bead formation for the outer side of the roller, providing rigidity and stiffness for the roller.

3. A structure as specified in claim 1, comprising rivets inserted through the plates and inner flange of the tread section, at said points, with said tread section of thicker metal than the body plates.

4. In a skate roller, disk-like side plates forming the body of the roller, secured flatwise together, having annular flangeless outer edges, but having their inner edge portions bent apart to accommodate anti-friction members, and an an-

nular tread section forming the outer periphery of the roller and flanged for flatwise engagement with said body of the roller, a hub for engagement with said anti-friction members, said plates 5 and tread section being rigidly fastened together at points between said ball race and the outer periphery of said plates, said tread section being bent at the side to form an annular hollow bead formation for the outer side of the roller, providing rigidity and stiffness for the roller. 10

5. In a skate roller, disk-like side plates forming the body of the roller, secured flatwise together, having annular flangeless outer edges, but having their inner edge portions bent apart 15 to accommodate anti-friction members, and an annular tread section forming the outer periphery of the roller and flanged for flatwise engagement with said body of the roller, a hub for engagement with said anti-friction members, said 20 plates and tread section being rigidly fastened together at points between said ball race and the outer periphery of said plates, comprising rivets

inserted through the plates and inner flange of the tread section, at said points, with said tread section of thicker metal than the body plates.

6. In a skate roller, means forming a ball bearing two-piece body for the roller, having a flangeless periphery, and a tread section secured to 5 said body, said tread section having an annular outer side portion forming in effect a hollow bead, with the interior of the latter unoccupied, and whereby the body is entirely external of said 10 interior, thereby providing hollow bead strength with lightness and rigidity for the roller.

7. In a skate roller, side plates having flangeless outer peripheries held tightly together, and means fastened to the said plates at one side 15 thereof to form a relatively wide annular tread for the roller, with a hollow unoccupied annular bead at one side thereof.

8. A structure as specified in claim 7, the said tread having an inner flangeless surface, engaging 20 the combined outer periphery of said plates.

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