June 23, 1964 C. B. SMITH 3,138,375

GROUND SUPPORTED AMUSEMENT ROLLER OPERABLE BY TREADING THEREON

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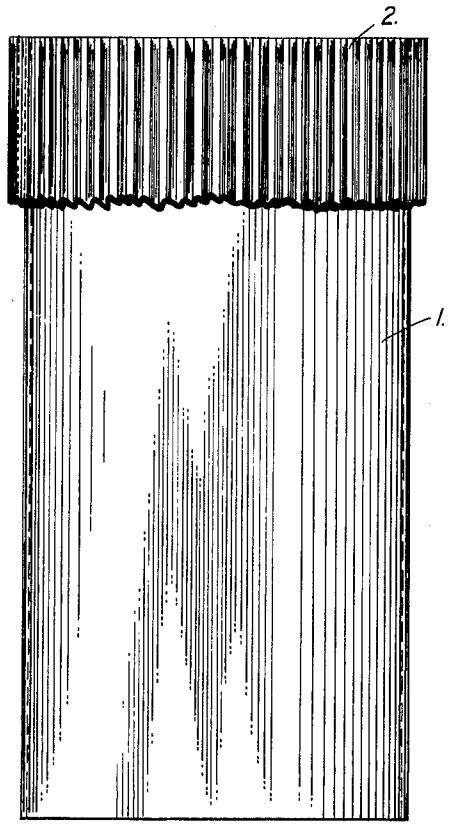

Fig. 1.

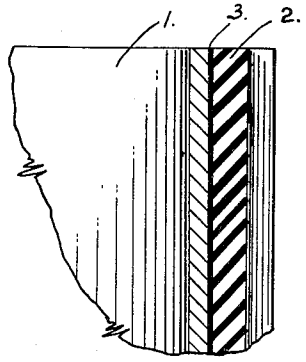

Fig. 3.

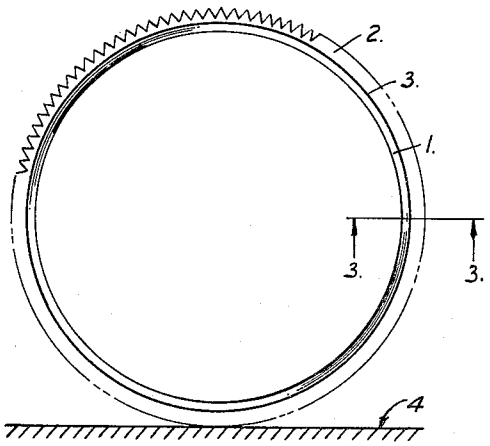

Fig. 2.

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GROUND SUPPORTED AMUSEMENT ROLLERS OPERABLE BY TREADING THEREON

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2 Claims. (Cl. 272—1)

This invention relates to a roller and more particularly, to a rolling toy device of the type adapted to be rolled by treading thereon.

The main purpose of the present invention is to provide a roller of the type adapted to be used primarily by children in recreational and play activities as by treading the roller that results in forward or backward movements.

It is further the purpose of the present invention to provide a rolling device that serves effectively in physical therapy treatments particularly for convalescents who are undergoing physiotherapy for an atrophic muscular condition by promoting muscular coordination and activation of the lower limbs.

It is still further the purpose of the present invention to provide a toy device which is of simple construction, is easy and economical to manufacture, is strong and rugged, is easy to learn, and is very amusing and entertaining, and very beneficial to children and others for muscular development.

The roller constructed in accordance with the present invention comprises a hollow cylinder of sheet material covered with flexible material and having a rippled or corrugated outer surface for providing a secure footing during operation.

These and other features of the present invention are described in detail below in connection with the accompanying drawing, wherein like numerals designate like parts, and in which:

FIGURE 1 is a top plan view of a roller embodying the present invention;

FIGURE 2 is an end view of the roller of FIGURE 1 supported on a support of solid material; and

FIGURE 3 is a fragmentary section, on an enlarged scale, taken substantially on line 3—3 in FIGURE 2.

Referring now in detail to the drawing, the roller illustrated in the drawing as an embodiment of the present invention comprises a hollow cylindrically shaped body or shell 1 having both ends open. Cylinder 1 is preferably constructed of sheet metal of a firm, light-weight, malleable kind of metal, such as aluminum, and the like, which may be reinforced, if necessary, in the interior for supporting human weight up to two hundred pounds without losing its original shape and structure quality over a reasonable period of time. The ends of the cylinder 1 are open so as to provide for gripping the same and rendering it light in weight.

On the outer cylindrical surface, the cylinder 1 is covered with a sheet 2 of flexible material, such as rubber and the like, fixed or bonded thereto by any conventional means of adherence, such as bonding cement. The flexible cover is approximately one inch in thickness and is formed with rippled corrugations or grooves 3 extending longitudinally on the outer surface thereof to insure a secure footing on the ridges between the grooves when

in use. The length of the roller 1 may be three feet and the diameter may be of one or one and a half feet for average use.

The operation of the roller of the present invention is very simple. The roller is first placed in a horizontal position on the ground or suitable support of solid material 4 so as to be able to roll. Treading upon the roller and propelling by the feet of the operator results in a forward or backward rolling motion of the roller relative to a point on the support of solid material. During rolling motion of the roller, it is rather difficult for an experienced operator to stand thereon. It is therefore necessary for the operator to properly balance himself thereon and to continue rolling the roller so as to prevent from falling off from the roller. However, at no time at all, one, and especially children, can master the operation of the roller of the present invention which provides pleasure in recreational and play activities.

The present invention has been described in detail above for purposes of illustration only, and is not intended to be limited by this description or otherwise, except as defined in the appended claims.

What I claim is:

1. A roller toy device adapted to be rolled over ground surfaces in forward and backward rolling movements by treading thereon for recreation comprising; a hollow cylindrical sheet metal body of uniform diameter and substantially uniform thickness, said metal being of a gauge sufficient to withstand the weight of 200 pounds without permanent deformation; a cylindrical cover of flexible resilient material circumscribing and completely covering the external surface of said body, the interior surface of said cover being substantially smooth and in tight hugging engagement with said body, the exterior of said cover being provided with a plurality of longitudinal transversely disposed yieldable peaks circumferentially arranged adjacent one to the other, and extending the length of said cover, the said peaks defining the outer periphery of the roller; and adhesive means disposed between said body and said cover to prohibit separation thereof; said roller being supported by and in rolling contact with a support of solid material of sufficient linear extent to permit significant displacement of the roller by a user thereof; whereby said roller is adapted to be treaded upon for forward and backward rolling motions providing a firm footing during operation thereof, with said yieldable peaks being adapted to provide traction on grass covered ground surfaces.

2. A roller as set forth in claim 1 having a body with a diameter of substantially one and one-half feet and a length of substantially three feet.

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