

(No Model.)

E. B. MANSFIELD.
ROLLER FOR PARLOR SKATES.

No. 278,666.

Patented May 29, 1883.

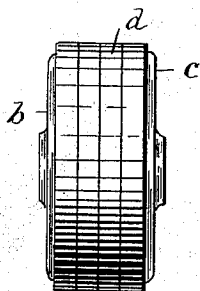


Fig. 1.

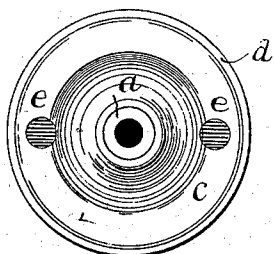


Fig. 2.

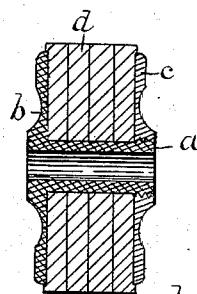


Fig. 3.

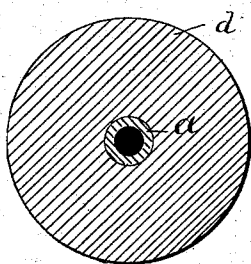


Fig. 4.

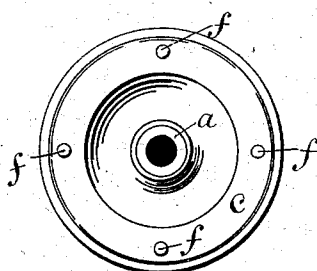


Fig. 5.

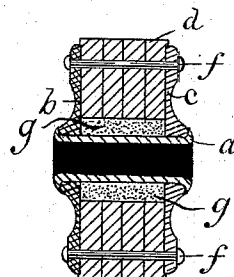


Fig. 6.

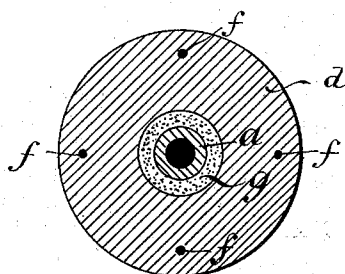


Fig. 7.

Witnesses.

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UNITED STATES PATENT OFFICE.

EBEN B. MANSFIELD, OF MALDEN, ASSIGNOR OF ONE-HALF TO THOMAS CURLEY, OF WALTHAM, MASSACHUSETTS.

ROLLER FOR PARLOR-SKATES.

SPECIFICATION forming part of Letters Patent No. 278,666, dated May 29, 1883.

Application filed April 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, EBEN B. MANSFIELD, of Malden, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Rollers for Parlor-Skates, which will, in connection with the accompanying drawings, be hereinafter fully described, and specifically defined in the appended claims.

This invention relates to the rollers or trucks which are employed in skates known as "parlor-skates;" and the invention consists in a roller having a peripheral face formed of leather, or the analogous material, of green hide, and in the combination therewith of the devices employed for mounting the leather or green hide.

In said drawings, Figure 1 is an edge elevation of my improved roller complete for use. Fig. 2 is a side elevation of the same. Fig. 3 is a longitudinal section of the wheel shown in the preceding figures. Fig. 4 is a transverse section of the same. Fig. 5 is a view similar to Fig. 2, but showing the supporting-disks united by rivets which pass through the leather parallel with the axis of the roller. Fig. 6 is a longitudinal section of the roller shown in Fig. 5, two of the rivets being shown in elevation, and a cushioning rubber sleeve being also shown in section. Fig. 7 is a transverse section, showing the same parts as are shown in Fig. 6.

In said views, *a* represents a metallic sleeve, which receives the pivot of the skate, on which the roller revolves when the skate is in use. Said sleeve may be formed as an integral part of disk *b*, as shown in Fig. 3, and the disk *c* be secured thereon by screw-threads, as shown in said figure; or said sleeve may be a section of a tube formed independently of said disks, and be secured therein by riveting, as shown in Fig. 6; or said sleeve may be formed as a part of one disk, as shown in Fig. 3, and the other disk be secured upon it in the manner shown in said Fig. 6.

The disks *d*, which constitute the peripheral face of my roller, are cut from leather of the desired solidity, and are concentrically mounted either directly upon sleeve *a* or upon said sleeve with an interposed body, *g*, of elastic rubber,

after which disks *b c* are pressed against the leather with the requisite force to duly compress the same. When the disks are arranged in relation to the sleeve as shown in Fig. 3, such compression is effected by rotating disk *c* by means of a spanner inserted in holes *e* therein, the screw-thread connection between disk *c* and sleeve *a* serving to produce such compression when the disk is rotated in a right-hand direction; and when the disks and sleeve are arranged as shown in Fig. 6 the disks are forced against the leather in a suitable press, when the ends of the sleeve are enlarged so as to produce the riveting thereof. After the leather is thus secured in place between the disks the roller is mounted in a lathe and the leather is turned perfectly true and concentric with the axis of the sleeve. When these rollers are to be subjected to severe strain by reason of unusual weight of the person using the skate, or from other causes, I employ, in addition to the means already described for securing disks *d* in place, the rivets *f*, which, passing through the roller parallel with the sleeve and between the sleeve and the periphery, serve to so secure the parts together that no severity of strain to which they may be subjected in use will in any degree release the pressure of the metallic disks upon the leather; and said rivets also prevent the possibility of the rotation of the leather between the disks and upon the sleeve in case the latter should not rotate freely upon its arbor. For the purpose of cushioning and muffling the rollers where even a small amount of noise would be objectionable, I employ a sleeve or tube, *g*, of elastic rubber, which is arranged upon sleeve *a* and within disks *d*, and which serves as the immediate axial support of the leather.

By the employment of leather as the peripheral face or bearing of my roller the skate is rendered almost noiseless as compared with those provided with the usual wood rollers, whose resonant properties cause them to produce a most unpleasant noise when in use; and, besides, such wooden rollers rapidly disintegrate and destroy the floors upon which they are used; and by interposing rubber *g* between the leather *d* and sleeve *a* the elastic property of the rubber is largely economized in cushion-

ing the skate, while it is preserved from the rapid disintegration which occurs when it is employed as the peripheral face of the roller, besides which, leather possesses an advantage
5 over all other materials of which I have knowledge for such use, in that it gives exactly the desired degree of hold or contact with the floor, which constitutes an important quality in such rollers.

10 I claim as my invention—

1. A skate-roller formed with metallic sleeve *a*, disks *b* *c*, and concentric disk-like rings *d*, of leather or green hide, mounted upon said sleeve and compressed between said disks, sub-
15 stantially as specified.

2. A skate-roller formed of the materials and in the manner specified in the preceding claim, and having the securing-rivets *f* arranged near its periphery, in the manner shown.

3. In a skate-roller formed with metallic sleeve *a*, disks *b*, and the leather or green-hide disk-like rings *d*, as specified, the elastic rubber sleeve *g*, interposed between sleeve *a* and rings *d* to cushion the same, substantially as specified.

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Witnesses:

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