(No Model.)

T. H. DEAN.

ROLLER SKATE.

No. 305,434. Patented Sept. 23, 1884.

Fig. 1.

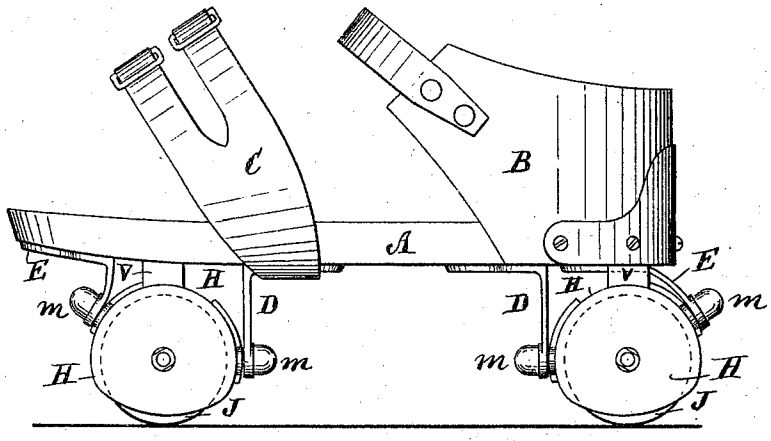


Fig. 2.

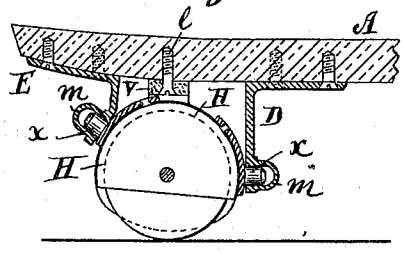


Fig. 3.

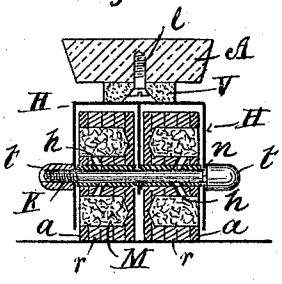


Fig. 4.

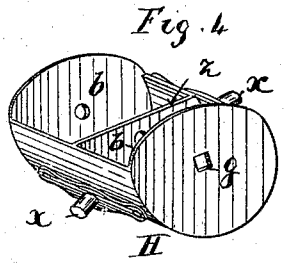


Fig. 5.

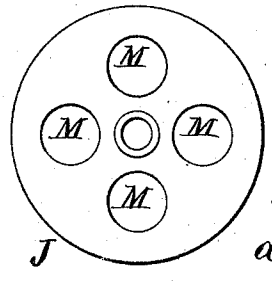
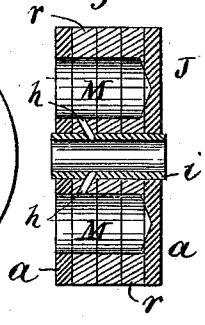


Fig. 6.



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UNITED STATES PATENT OFFICE.

THOMAS H. DEAN, OF EASTON, MASSACHUSETTS.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 305,434, dated September 23, 1884.

Application filed May 28, 1884. (No model.)

To all whom it may concern:

Be it known that I, THOMAS H. DEAN, of Easton, in the county of Bristol, State of Massachusetts, have invented a certain new and useful Improvement in Roller-Skates, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation of my improved skate; Fig. 2, a vertical longitudinal section of the same, a portion of the body being represented as broken away. Fig. 3, a vertical transverse section taken through the center of the forward axle; Fig. 4, an isometrical perspective view of the guard and roller carriage reversed; Fig, 5, an enlarged side elevation of one of the rollers or trucks detached, and Fig. 6 a vertical transverse section of the same.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of roller-skates which are provided with a pair of rollers at either end, and a spring interposed between the axle of either pair of rollers and the body of the skate; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a more desirable and effective article of this character is produced than is now in ordinary use. In nearly all skates of this character much difficulty is experienced, when they are used by ladies, in keeping the oil with which the axles are lubricated from coming into contact with their skirts, as well as properly lubricating the axles. The rollers or trucks are also usually composed of solid box-wood or similar materials, which are liable to slip on the floor in turning, wear unevenly, and produce a disagreeable noise.

To obviate these and other objections, simplify the construction, and increase the utility of the skate is the design of my present invention, the nature and operation of which will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of the skate, B the heel-strap, and C the toe-strap, all of these parts being of the ordinary construction, and not in and of themselves claimed broadly herein.

Secured to the under side of the forward end of the body A there are two downwardly-projecting brackets, D E, a corresponding pair of brackets being also secured to the body at the rear end or heel, as best seen in Fig. 1. A carriage or guard, H, provided with a centrally-disposed outwardly-projecting stud, *x*, on either side is journaled in each pair of the brackets D E, the studs projecting into sockets *m* formed in the brackets, and by which the studs are also covered. The guard is divided into two chambers or compartments by the transverse partition *z*, and the trucks J are journaled in the guard, one in each compartment, by means of the axle K, which passes through suitable holes, *b*, in the side walls of the guard and partition *z*, and is provided at either end with a cap-nut, *t*. An elongated rubber cushion or spring, *v*, is disposed between the top of each of the guards H and the bottom of the body A, these cushions being held in position by screws 1. The body of each of the rollers or trucks is composed of annular leather plates, and the sides *a* of corresponding plates of green hide, the plates being connected by suitable rivets. (Not shown.)

A series of pockets, M, are formed in the body of each of the rollers, the pockets being filled with cotton waste or some other suitable absorbent for the oil, and provided with ducts *h* which extend through the bushing or axle-box *i* to the axle K, the cotton being kept properly saturated with the lubricant when the skate is in use. The plates of leather and green hide form a very durable wheel, and one which runs with comparatively little noise. The cotton in the pockets M being saturated with oil keeps the axles constantly and uniformly lubricated. The guards extend nearly to the floor and effectually prevent the rollers from being brought into contact with the clothing of the person using the skates, or that of others in the vicinity. The spring interposed between the guard and body of the skate permits the body of the skate to be rocked or canted laterally on the pivots or studs in turning or skating on a curve. The axle-hole in the guard is squared in one

of the heads of the guard, as shown at *g* in Fig. 4, and the axle K has one of its ends squared, as shown at *n*, Fig. 3, to fit said hole, thereby preventing the axle from turning in the guard and the nuts *t* from working loose.

I do not confine myself to constructing the rollers of leather and green hide or providing them with pockets and ducts, as described, as they may be made of box-wood or other suitable material, and the pockets and ducts omitted, if desired. Neither do I confine myself to constructing the guard with the partition *z* or squared hole *g*, or to forming the sockets *m* in such a manner as to cover the studs *x*. The studs may also be formed on the brackets and proper holes for receiving them in the guard, if desired.

Having thus explained my invention, what I claim is—

1. In a roller-skate, the combination of the following instrumentalities, to wit: a body or foot-piece, means for attaching the body or foot-piece to the foot of the wearer, two downwardly-projecting brackets at or near either end of the body or foot-piece, a guard or carriage journaled in either pair of said brackets, a pair of trucks or rollers journaled in either of said guards, and an elastic cushion or spring, the guards being adapted to cover all parts of the rollers except their lower or bearing edges and to rock laterally in the brackets, the rollers journaled at right angles to the axial line of the guard, and the spring interposed between the guard and body of the skate and adapted to keep the body in a horizontal position, substantially as described.

2. In a roller-skate, the brackets D E, provided with the covered sockets *m*, for receiving the studs or journals of the carriage H, substantially as set forth.

3. In a roller-skate, the guard H, provided with the studs *x*, in combination with the rollers J, axle K, brackets D E, and spring *v*, substantially as described.

4. The improved roller-skate herein described, the same consisting of the body or foot-piece A, provided with the straps B C, the brackets D E, provided with the sockets *m*, the guard H, provided with the studs *x*, partition *z*, and holes for receiving the axle, the axle K, provided with the nuts *t*, the spring *v*, provided with the screw *l*, and the rollers J, composed of leather and green hide, and provided with the pockets M and ducts *h*, constructed, combined, and arranged to operate substantially as described.

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