C. W. SALADEE.

ROLLER SKATES.

No. 181,868. Patented Sept. 5, 1876.

Fig. 1.

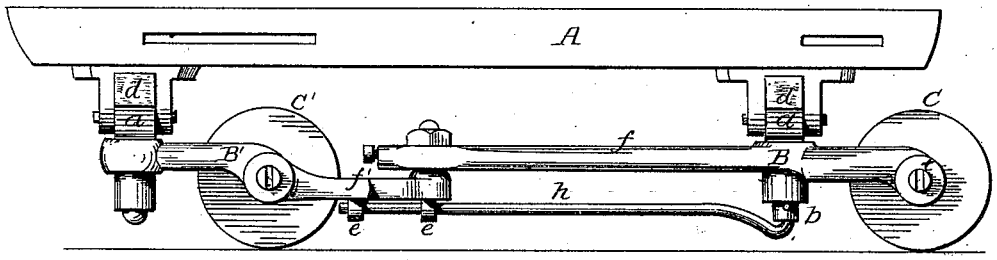


Fig. 2

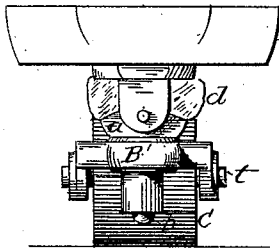


Fig. 3.

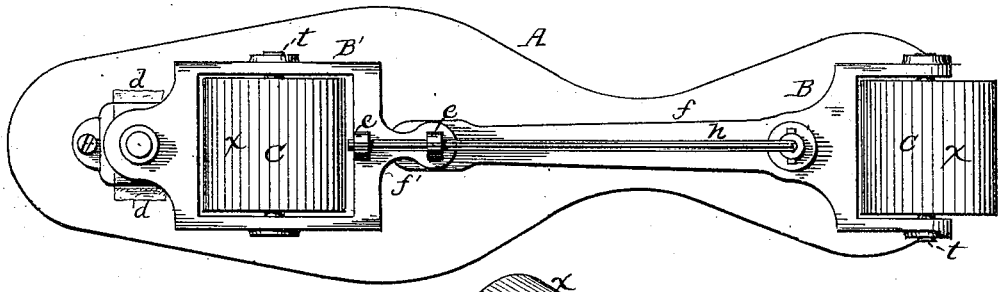
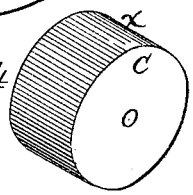


Fig. 4



Attest:

E. H. Green.

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UNITED STATES PATENT OFFICE.

CYRUS W. SALADEE, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN ROLLER-SKATES.

Specification forming part of Letters Patent No. **181,868**, dated September 5, 1876; application filed July 13, 1876.

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, of Washington, District of Columbia, have invented an Improved Parlor-Skate, of which the following is the specification:

The object of my invention is a parlor-skate, constructed, as fully described hereafter, to afford a steady bearing, reduce weight and friction, and insure greater durability and increased efficiency.

In the drawing, Figure 1 is a side elevation of a parlor-skate embodying my improvements; Fig. 2, an end view; Fig. 3, an inverted plan; and Fig. 4, a perspective view, showing one of the rollers.

A is the foot-piece, which is pivoted in any suitable manner to blocks *a a*, provided with studs or pivots *b*, on which vibrate frames B B′, carrying the rollers C C. Blocks *d*, of rubber or elastic material, intervene between the foot-piece and the blocks *a*, limit the rocking movement of the foot-piece, and tend to maintain it in a horizontal position. The foot-piece may be pivoted directly to the roller-frames, or the blocks *a* may be parts of a continuous frame, parallel with the foot-piece. Inwardly-projecting arms *f f′* of the frame B B′ are connected by a pin extending from the arm *f′* through a slot of the arm *f*, and a spring, *h*, passing through the lugs *e e* on the frame. B is connected at the opposite end to the stud *b*, on which the frame B vibrates.

As the parts above described are similar in their operation to the similar parts of the skates heretofore patented by me, and especially of the skate for which application for Letters Patent was filed June 14, 1876, it will not be needful to describe their general features more fully. I will, therefore, proceed to point out the special features which constitute my improvements.

In the aforesaid skate the foot-piece was combined with frames, each adapted to carry one, two, or more rollers, and at least two rollers being absolutely needed when the tilting foot-piece was employed, as the rollers were so narrow that they would not afford a horizontal support for the frames when the foot-piece was tilted, but would also be inclined, and prevent the proper operation of the skate. By the use of two rollers, side by side on each frame, this defect was remedied; but it was necessary to use heavy frames, and the limited width of the separate bearings prevented the use of vitreous rollers. I effectually obviate all these objections by constructing each frame supporting the bearings of a single roller, C, of such a width, approximating its diameter, that either roller will of itself support the skate in an upright position, and will maintain the frames horizontal, whatever may be the inclination to which the foot-piece is tilted. The face of the roller, instead of being round, is made flat transversely, affording a stable bearing the entire width of the roller. By making the roller of increased width, which I have found must exceed three-fourths the diameter, I am enabled to substitute glass or vitreous material for the materials heretofore employed, combining strength, lightness, and elegance, affording a hard, almost frictionless, bearing on the axle, and avoiding the use of the bushing employed in ordinary rollers. Owing to the nature of the vitreous material, a parlor-skate provided with glass or vitreous rollers possesses an important advantage over one having rollers of wood or hard rubber. When wood, hard rubber, or similar material is used for the rollers, constant use will polish the bearing-edge so that the roller is apt to slip under the lateral thrust on the skate, especially upon highly-polished wood or other floors. A roller of vitreous material, however, even if applied to the skate with a glazed edge, will, in a little time, become scratched and broken, until the edge is in the condition it is left after grinding, and is maintained in this condition by use, so as to take a firm hold upon the supporting-surface, and effectually prevent lateral slipping. When the glass roller is employed, it is preferable to grind the face *x*, to give it a better hold on the supporting-surface. Where glass rollers are not employed, the frictionless bearing may be still obtained by inserting a glass or vitreous sleeve or bushing in the ordinary roller. It will be apparent that one wide and one narrow roller may be used.

In my former skates, the spring *h* passed laterally through the stud *b*, the lateral opening weakening the stud, and the abrupt bending of the spring tending to break the latter.

By bending the end of the spring upward, and fitting it to a socket in an axial direction in the stud, as shown in Figs. 1 and 3, the strength of the stud is not materially impaired, while the spring will turn in the socket, thus avoiding the abrupt bend and danger of breaking.

I am aware that glass and vitreous rollers have been employed in casters, and that glass wheels and pulleys have been used; but I am not aware that a glass roller or wheel has ever been provided with a roughened periphery, for any purpose.

I claim—

1. A roller-skate provided with two swiveling-rollers, each pivoted in front of its bearing beneath one end of a tilting-stock, and having its bearing at the rear of said pivot exceeding in width three-fourths the diameter of the roller, as and for the purpose set forth.

2. A skate provided with a spring, *h*, bent at the end, and adapted to an axial socket in the stud *b*, for the purpose specified.

3. As a new article of manufacture, a roller-skate, provided with vitreous rollers having roughened peripheries, substantially as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CYRUS W. SALADEE.

Witnesses:

E. J. SWEET,

CHARLES E. FOSTER.