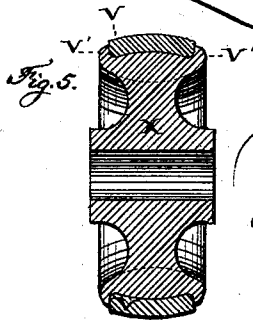
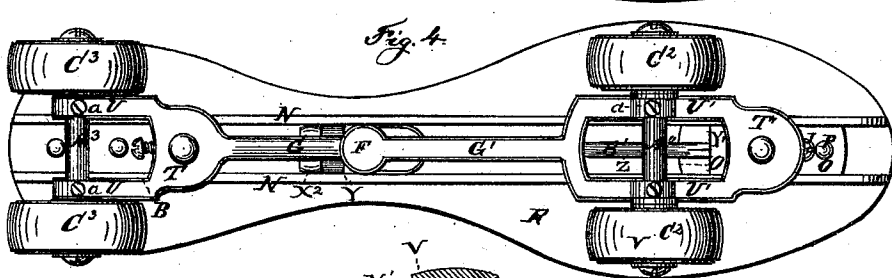
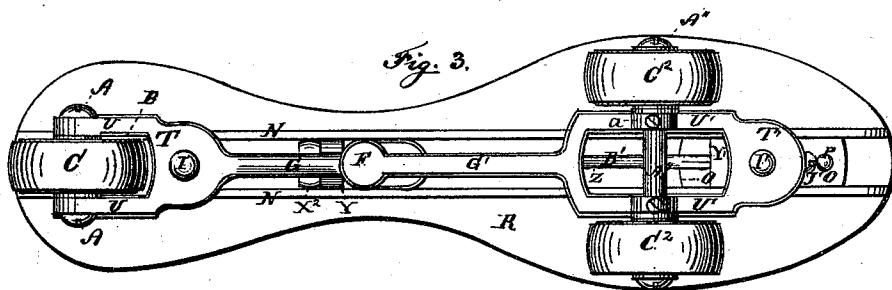
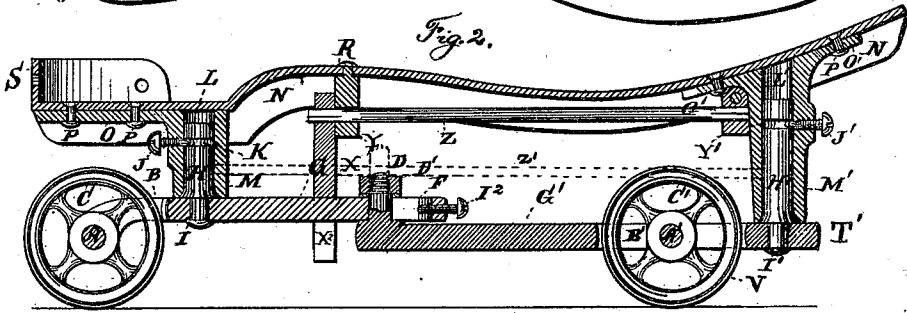
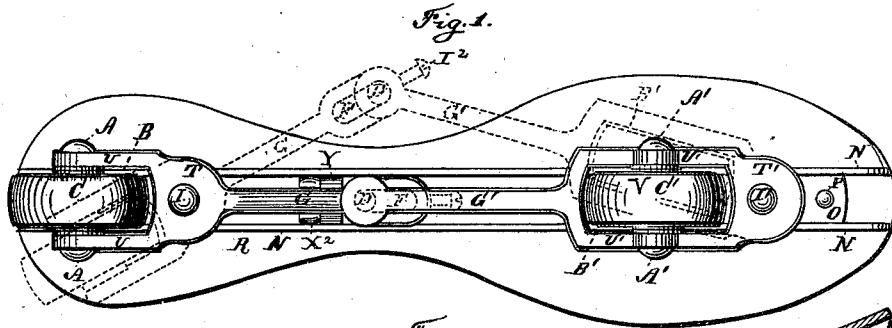


C. W. SALADEE.

PARLOR SKATES.

No. 177,566.

Patented May 16, 1876.



WITNESSES :

Henn. Lauter
Abby C. Saladee

INVENTOR:

C. W. Saladee

UNITED STATES PATENT OFFICE.

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

IMPROVEMENT IN PARLOR-SKATES.

Specification forming part of Letters Patent No. **177,566**, dated May 16, 1876; application filed May 2, 1876.

To all whom it may concern:

Be it known that I, CYRUS W. SALADEE, of Washington, in the District of Columbia, have invented certain Improvements in Parlor-Skates, of which the following is a specification:

To enable others skilled in the art to make and use my invention, I herewith submit the following description:

A skate constructed with rollers that cramp, by means of a rocking or canting motion of the stock or foot stand, upon a hinged mechanism interposed between the stock and the axle-bearings of the skate, is no part of my invention. In my invention the pivot-bearings supporting the stock of the skate are secured to the roller-frames or coupling at a suitable distance in advance of the front and rear roller-bearings, said frames being connected and coupled together to form a sliding joint between the front and rear axles. By this arrangement of parts is secured two important objects: first, the weight imposed upon the roller-frames is evenly balanced, and no leverage is exercised upon the said pivot-bearings, which otherwise would sustain the lateral strain which is common to the ordinary caster-wheel pivots; and second, by a lateral horizontal movement of the toe and heel of the skater's boot in opposite directions, the rollers will be adjusted to run the skate in a curved direction to the right or left, as desired. Also, in my invention the roller-carrying frames of the skate are so constructed that the rollers and axles are made detachable, thereby admitting of using the skate with two, three, or four rollers, as circumstances may require; and third, my invention consists in the method of applying a spring to the stock and running-gear, or to the running-gear alone, so as to maintain the rollers in a straight line the instant they are relieved from the strain which compels them to run in curved lines, as will hereinafter more fully appear.

In the drawings, Figure 1 is a bottom-plan view of a two-roller skate on the plan of my invention. Fig. 2 is a vertical longitudinal section of the same through the center. Fig. 3 is a bottom-plan view of a modification, showing three wheels or rollers secured to the same stock. Fig. 4 is a bottom-plan view of a modi-

fication, showing four wheels or rollers secured to the stock; and Fig. 5 is a cross-section of the roller, showing the manner of securing thereto the attachable elastic band or tire V.

The roller-frames and coupling-bars G G' are formed with bearings U U' for the roller-axles, which bearings are spread apart, forming open spaces to admit the rollers C C', when only one roller is used in each frame, as shown in Figs. 1 and 3. The single-roller axles A A¹ are made removable, and in lieu of them the axles A² A³ for the double rollers C² C³ may be inserted in the bearings U U', to which they are secured by set-screws a, or other equivalent means. By this arrangement the skate may be used with two, three, or four rollers, as indicated in the different figures, or as may be desired. Each pair of skates will be provided with eight rollers, and four long and four short axles, A A¹, so that the beginner may first use four rollers, and afterward reduce them to three and to two as he attains proficiency in the use of the skates. The roller-frame or coupling-bar G' is extended forward to form a bearing, T', on which to secure the center pin or pivot H'. Immediately in front of the rear roller-bearing is formed the bearing T, on which to secure the rear center pin or pivot H. The inner end of the roller-frame or coupling-bar G' has a stud, D, formed on the upper side, and the rear bar G has its inner end formed with an oblong slot fitting over the stud D, and in which the latter is permitted to slide, to admit of the position seen in dotted lines in Fig. 1. To regulate the travel of the stud D in its slot F, and thereby limit the lateral motion of the coupling-bar joint, a set-screw, I², is passed into the end of the bar G, reaching through and into the slot F. The stock or foot-stand R is of the usual make and form. To the front end is secured a socket, M', Fig. 2, which fits over the center pin or pivot H'. To the rear end of the stock is secured a socket, M, which is in like manner fitted over the center pin or pivot H. These connections are secured by the set-screws J and J', the points of which fit into corresponding grooves in the center-pins. The stud D is held in the slot F, and the coupling-bars joined together either by means of a screw-nut or by a pin driven through its body. For the pur-

pose of keeping the coupling-bars on a line with each other, and to force them back to that position from the one seen in dotted lines in Fig. 1, when the rollers are relieved from the strain directing and holding them in a curved line, or when lifting the skate clear of the floor, a torsional spring, Z, is employed, having the one end rigidly fixed to the front end of the stock at O' Y', Fig. 2, while the opposite end is passed loosely through the bearing Y, and secured to the swinging standard X². The lower end of the standard X² is forked, one prong extending down on each side of the main body of the rear coupling-bar G. Thus, as the coupling is moved to the right or left, the swinging standard operates to twist the spring Z, the resistance to which will tend to return the coupling-bars to a straight line central to the skate.

In Fig. 2 is shown a modification of a spring that may be substituted for the one hereinbefore described, and answer the same purpose. It is represented by the dotted lines Z'. In this modification a flat or round strip of steel is passed through the stud D of the coupling-bar G', and the opposite ends of the spring are loosely passed into the body of the socket M and M'. Thus arranged, the straight strip of steel will be bent as the stud D is moved laterally to the right or left, and, having a bearing at each end, as shown, will tend to keep the coupling-bars in a line with each other. With the application of the usual fastenings to secure the boot of the skater in position on the stock, the skate is complete.

To turn the skate the toe of the boot is turned in the direction required, and the heel in the opposite direction, when, by reason of the weight being imposed upon the center pins or pivots H H', which pins are in advance of the bearing of the rollers on the floor, like the

ordinary caster-wheels, the coupling-bars G G' will instantly yield to such horizontal lateral pressure, and take the position indicated by the dotted lines, Fig. 1. The roller-axes will thus be in a position radial to the curve, and the skate will turn to the right or left, as desired. Another important office of the coupling-bars is to prevent the leverage which is exerted on the pivots in the ordinary caster-wheels. Their construction is such as to balance the weight carried by the center-pin or pivot-bearings T T', for these points being an equal distance in advance of the front and rear roller-bearings on the floor, the tendency of the rear end of the coupling-bar G' is upward, while the tendency of the front end of the rear coupling-bar G is downward. By uniting the bars at their point of meeting, these two pressures are counteracted, and the center pins or pivots H H' are relieved of that lateral strain they otherwise would have to sustain.

I claim—

1. In a parlor-skate, the roller-frames G G', in combination with the coupling D F, axle-bearings U U', and pivots H H', the whole constructed and arranged to operate substantially as and for the purpose described.

2. In a parlor-skate, the roller-frames G G', having the axle-bearings U U', in combination with the detachable axles, all constructed and arranged to operate substantially as and for the purpose set forth.

3. In a parlor-skate, the torsional spring Z or spring Z', in combination with the stock R and coupling-bars G G', substantially as and for the purpose set forth.

CYRUS W. SALADEE.

Witnesses:

ABBY C. SALADEE,
STELLA J. CHAMBERS.