(Model.)

C. HERDER.

ROLLER SKATE.

No. 257,941. Patented May 16, 1882.

Fig. 1.

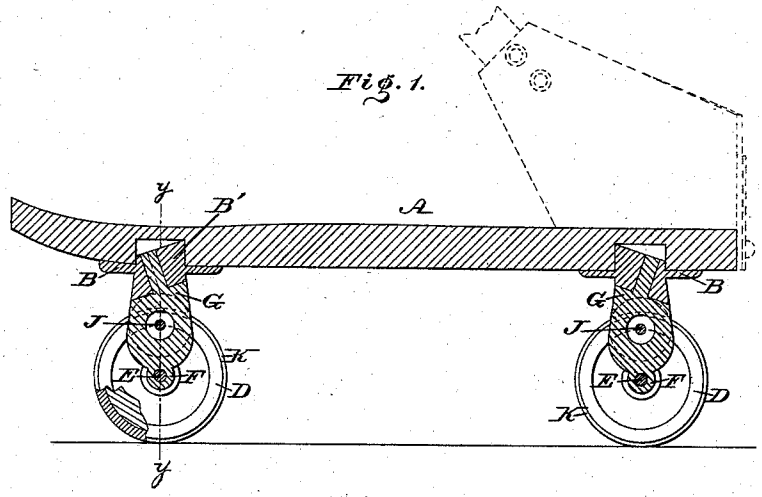


Fig. 2.

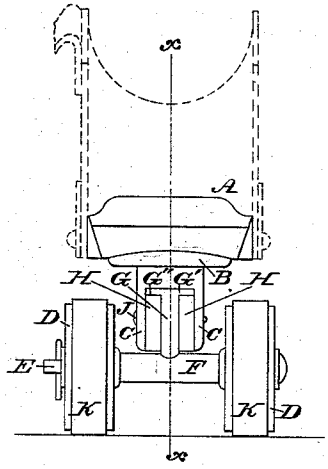
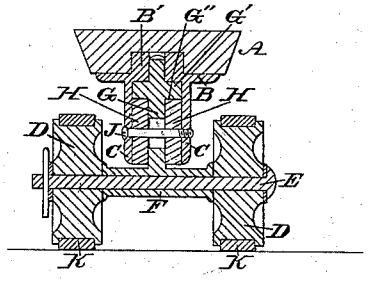


Fig. 3.



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CHARLES HERDER, OF PHILADELPHIA, PENNSYLVANIA.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 257,941, dated May 16, 1882.

Application filed March 6, 1882. (Model.)

To all whom it may concern:

Be it known that I, CHARLES HERDER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Roller-Skates, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a longitudinal vertical section of the roller-skate embodying my invention in line *x x*. Fig. 2 is a front view thereof. Fig. 3 is a transverse section in line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a roller-skate to which are fixed brackets having depending ears, between each of which are fitted springs and rotating spindles, whereby the construction of the skate is simplified, rendered more durable, and its expense decreased.

It also consists of means for increasing the bearings of the spindles and the connection of the brackets with the foot-rest.

Referring to the drawings, A represents the foot-rest of a roller-skate, to the under side of the front and rear of which are rigidly secured brackets B B, from which depend ears C C, formed with the brackets.

D represents the rollers of the skate, each pair of which is secured by means of the axial pin E to a horizontal boss, F. From the center of the boss rises a flat-sided spindle, G, which is passed between the ears C C, and has its upper end rotatably guided in an opening in the bracket B, the width of the spindle being less than the width of the space between the ears.

H represents pieces of rubber or other elastic material or springs, which are fitted between the spindle and ears, so that there is a spring between each ear and the spindle, or, in other words, a spring on each side of the spindle. In the ears, springs, and spindles are openings, through which is passed a securing-pin, J, whereby the rollers are connected to the skate and the springs H retained in position.

The upper portion of the spindle is formed with a head, G′, which is in contact with the under side of the bracket and provides an enlarged bearing for the spindle, thus increasing the strength of the connection of the rollers with the bracket and causing the spindle to turn true on the bracket. The base of the head forms a shoulder, G″, which overhangs the springs H and limits the upward expansion of said springs, whereby the strength of the latter when in service is materially preserved.

The skate is connected to the foot by proper means, and when in use, when the skater sways his body either to roll to the right or left or change his direction for any purpose, the rotating spindles permit the axles of the rollers to turn from their right-angular positions and accommodate themselves to the inclination of the foot-rest or direction of the weight of the body superimposed thereon. In the turning motions of the spindles the flat sides of the spindles compress the springs against the ears C, thus easing the thrust of the spindles as they are turned and preventing strain on the contiguous parts. As soon as the foot-rest is relieved the springs expand and restore the parts to their normal position.

It will be seen that the spindles are strong and durable, and that they are guided at top and have enlarged bearings thereat. Furthermore, the brackets have each an upwardly-projecting boss, B′, which enters an opening on the under side of the foot-rest, thus strengthening the connection of the bracket with the foot-rest, and, furthermore, provides a lengthened bearing for the top of the spindle. Again, the brackets are directly secured to the foot-rest, thus simplifying the construction of parts and decreasing the leverage, which otherwise serves to wrench the parts from their fastenings. The rollers are grooved circumferentially, and in the grooves are fitted endless bands K, of soft rubber, which form the treads of the rollers, so that the skate is run or rolled with ease and without harshness or noise, the sides of the grooves preventing displacement of the rubber, the bands being stretched over the rollers, and thus reliably retaining their position.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The brackets fixed to the foot-rest and provided with depending ears, in combination

with rotating spindles rising from the bosses of the axial pins of the rollers and fitted between said depending ears and the springs, substantially as and for the purpose set forth.

2. The fixed brackets, in combination with the rotating spindles, whose upper ends are guided in said brackets, substantially as and for the purpose set forth.

3. The fixed brackets, in combination with the rotating spindles, whose upper ends are guided in said brackets and provided with heads which bear against the brackets, substantially as and for the purpose set forth.

4. The rollers and spindles, in combination with the brackets formed with upwardly-projecting bosses, substantially as and for the purpose set forth.

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