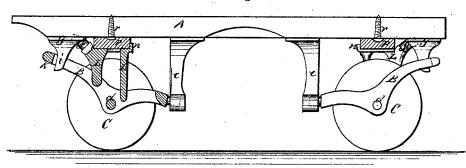
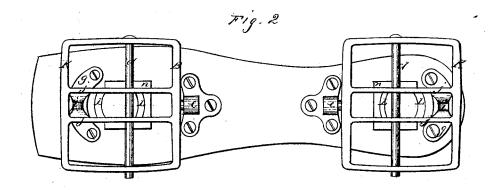
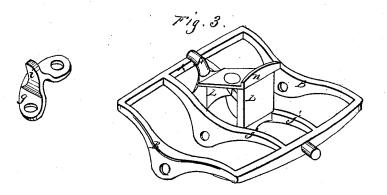
Kerr & Hovey, State. No. 113,062. Fatented S.

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## United States

## DAVID KERR AND ASA EBENEZER HOVEY, OF SAN FRANCISCO, CALIFORNIA.

Letters Patent No. 113,062, dated March 28, 1871.

## IMPROVEMENT IN SKATES.

The Schedule referred to in these Letters Patent and making part of the same,

To all whom it may concern:

Be it known that we, DAVID KERR and ASA EBENEZER HOVEY, of the city and county of San Francisco, State of California, have invented an Im-provement in Roller-Skates; and we do hereby declare the following description and accompanying drawing are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention or improvement without further invention or experiment.

Our invention relates to improvements in fourwheel roller-skates, such as are constructed to turn from side to side in curves or circles by tilting the skate-block with the foot or shifting the weight of the skater to either side of the skate; and

It consists-

First, in providing a plate to serve as a bearing for the journal which turns in the foot-block, which shall have a lug or projection cast with or upon it, and which shall serve to prevent the displacement of the truck in which the wheels revolve and relieve the strain upon the bearings.

It also consists in an improved method of seating the rubber block or spring upon the foot-block so that it can be more or less compressed, as desired; and also in the standard which bears upon the block, and by means of which the trucks are held in position.

In order to more fully explain our invention, reference is had to the accompanying drawing forming a part of this specification, in which-

A represents the foot-block of any roller-skate.

The wheels C revolve upon the axle d, inside of a truck or frame, B, which is secured to the bottom of the skate-block by having one end supported at the lower extremity of a standard, e, while the opposite end is supported by a journal, f, which turns in a bearing directly under the skate-block, thus causing the frame to stand at an angle to the block when the block is turned or canted upon the wheels to the position suitable for carrying the skate around in a curve.

In order to provide a bearing for the journal f, we use a metal plate or box, g, which has a recess at its

middle in which the journal bears.

This plate is secured to the under side of the skateblock by means of screws or other suitable device, and has cast upon it a lug or projection, i, which, when the frame is secured on the block, will pass down between the two central bars j of the frame, and a little inside of the cross-bar k, so that the frame can move up and down outside of it.

When the skate is in use the pressure upon the

wheels necessary to carry the skater forward or backward will be received by the standard e and lug i, the cross-bar k striking against the lug when an unusual pressure is brought to bear, thus providing a support at both ends of the frame.

At the center of the frame B we cast upon it a hollow standard, L, which extends up toward the

bottom of the skate-block.

On the upper face or rim of this standard we form

The India-rubber spring or cushion P rests upon a

screw, r, which screws into the skate-block.

The upper face of the standard L bears against the opposite side of the rubber cushion and keeps it in place, while the tension of the spring keeps the rollerframe horizontal.

When the skate-block is turned the pressure of the standard upon the cushion allows it to rock slightly

upon the screw, giving an easy turn.

By removing the frame B from its bearings the screw r can be set out or in, as desired, in order to give more or less or an easier elasticity to the rubber block, thus permitting it to be compressed to suit the wearer.

By this means we greatly improve the ordinary roller-skate. The lug i gives an additional support to the frame and prevents breakage; the hollow standard with its flanged face holds the India-rubber spring in place and prevents it from working or crawling out of position, while the ready manner of regulating the tension of the cushion gives an improved and more durable skate than those ordinarily used.

Having thus described our invention,

What we claim, and desire to secure by Letters Pat-

1. The plate or box g, provided with the lug i, in combination with the journal f and cross-bar k, substantially as and for the purpose set forth.

2. The hollow standard L, cast upon the frame B, and provided with the flange n, in combination with the cushion P and foot-block A, substantially as and for the purpose described.

3. The adjustable screw r, in combination with the cushion P, block A, standard L, and frame B, substantially as and for the purpose set forth.

In witness whereof we have hereunto set our hands and seals.

DAVID KERR. ASA EBENEZER HOVEY. [L. s.]

F. O. WEGENER, HENRY BERGGNER.