R. Shaler,

Parlor Skate.

No. 28,509. Patented May 29, 1860.

Fig: 1.

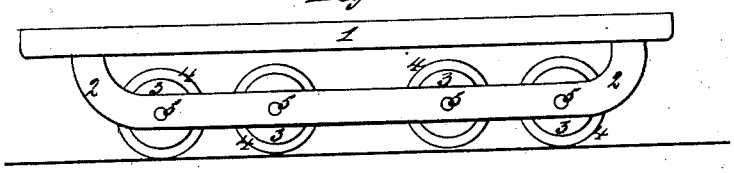

Fig: 2.

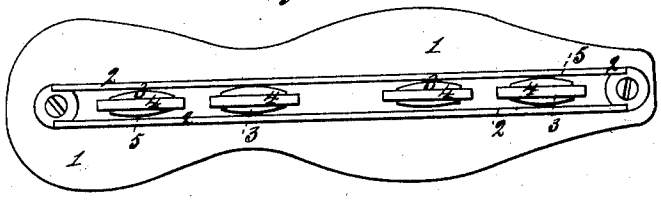

Fig: 3.

Witnesses:

J. W. Dudley
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Inventor:

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UNITED STATES PATENT OFFICE.

REUBEN SHALER, OF MADISON, CONNECTICUT.

WHEEL-SKATE.

Specification forming part of Letters Patent No. 28,509, dated May 29, 1860; Reissued March 15, 1864, No. 1,639.

To all whom it may concern:

Be it known that I, REUBEN SHALER, of Madison, in the county of New Haven and State of Connecticut, have invented an Improved Skate, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent and skilful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

My said invention consists in a skate, which in the place of the ordinary runner is provided with rollers the operating surfaces at the periphery of which is made elastic, by which they are made to take a better hold upon the floor or carpet, as hereinafter more fully set forth.

In the accompanying drawings:—Figure 1, is a side elevation of my improved skate. Fig. 2, is an underside view of it. Fig. 3, is a sectional view of one of the rollers, showing the manner of their construction.

1, is the skate wood, which is made in the usual manner.

2, 2, are side pieces which are united where they connect with the wood and form a hanger in which to hang the rollers. This hanger I unite to the wood with screws or otherwise as may be convenient, care being taken to secure it firmly.

3, 3, 3, 3, are the main bodies of the rollers, which are made of iron, brass, or any other suitable material. Steel may, perhaps, on some accounts, be better than anything else.

The body of each roller has a groove turned in its periphery to receive the india rubber ring 4, which is sprung on, its elasticity enabling the workman to do this without difficulty. Leather or some other substance may be used for this purpose, though I prefer india rubber. The elasticity and closely fitting nature of the rubber ring causes it to fit very snugly to the floor or carpet, and while metallic or wooden rollers might enable the wearer to go ahead in a perfectly direct line with about the same facility, they would be more liable to slip laterally in turning a curve, and would be more injurious in their action upon the floor or carpet. The rollers are secured upon axes or pins 5, fixed in the side pieces 2, the bearing or journal being in the roller, instead of in the side pieces, though the journals may be in the side pieces if preferred.

This skate is intended to be used upon a floor or carpet, and not upon the ice, and its arrangement with the elastic rollers enables the wearer to go through the same evolutions with it without slipping laterally that he could perform upon ice with an ordinary grooved skate made for that purpose.

I am aware that a skate with inflexible metallic rollers in the place of the ordinary runner has been known before the date of my invention. This skate is however impracticable and has never been used to any great extent, doubtless for the reasons that it is incapable of giving the necessary lateral adhesion to a smooth floor to enable the skater to perform the necessary evolutions of skating, or even to obtain by such adhesion the necessary motion in the operation of striking out; that it is noisy in its operation; and that it is liable to mar a floor or carpet on which it may be used. The skater in starting, by pointing his toes outward makes use of the lateral adhesion or hold of his skate to enable him to obtain by means of the resistance which such adhesion affords, the necessary or desired velocity. It is obvious that smooth metallic rollers cannot give this lateral hold, and if provided with sharp edges to make them "bite," it is obvious that their action must be very destructive to the surface upon which they are to operate, an effect which a roller with a hard metallic surface, can at best hardly fail to produce. My invention remedies these fatal defects and gives a surface of contact which on the one hand gives the necessary adhesion and on the other makes it harmless to floors on which it may be used. It besides gives an easy elasticity to the tread as it strikes the floor and prevents that noisy concussion and disagreeable jar which must ensue from the use of the inflexible roller. The flexibility of the rollers of my skate in a lateral direction also allows the skater to run his skate in a curved line without releasing at all his

hold upon the floor, which is a matter of very considerable importance in the performance of evolutions.

Having fully described my said invention and the manner in which the same is to be carried into effect, I claim—

The skate described which in the place of the ordinary runner is provided with rollers the periphery of which is made elastic, substantially as and for the purposes set forth.

REUBEN SHALER.

Witnesses:

J. W. DUDLEY,

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