(No Model.)

R. C. REID.

ROLLER SKATE.

No. 304,031. Patented Aug. 26, 1884.

Fig. 1.

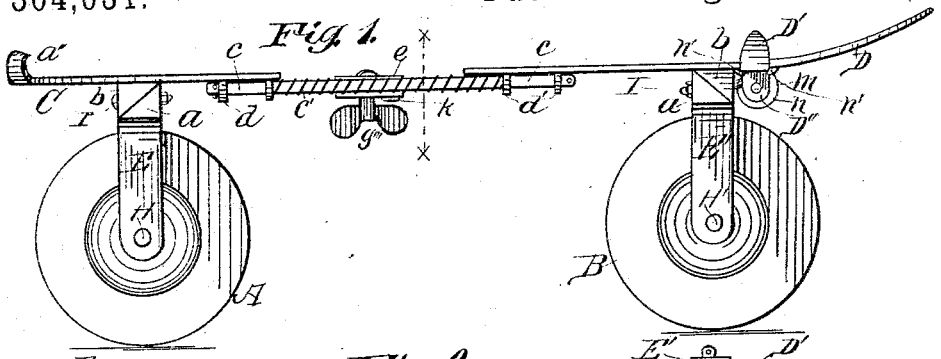


Fig. 2.

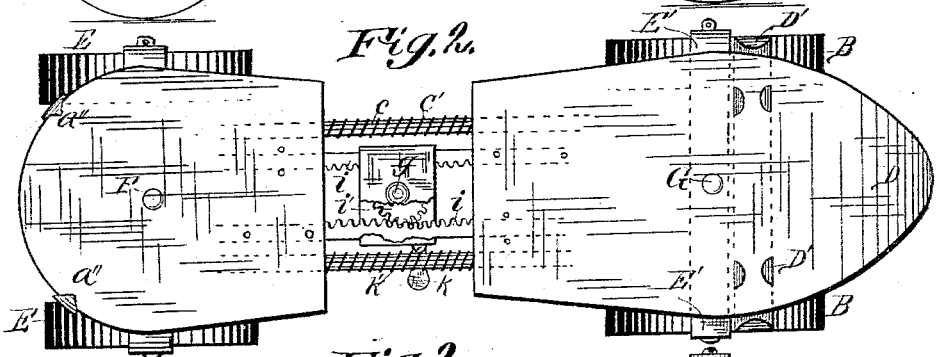


Fig. 3.

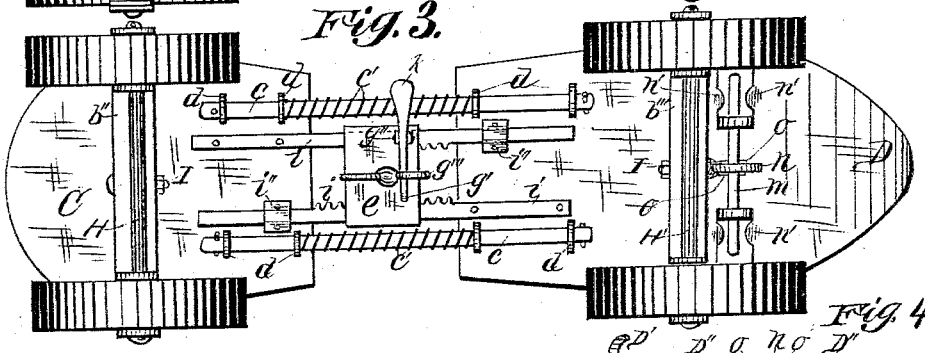


Fig. 4.

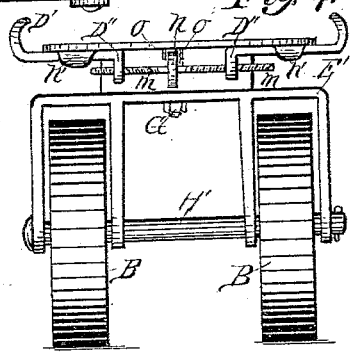


Fig. 5.

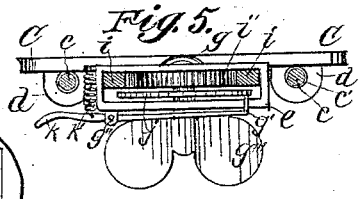
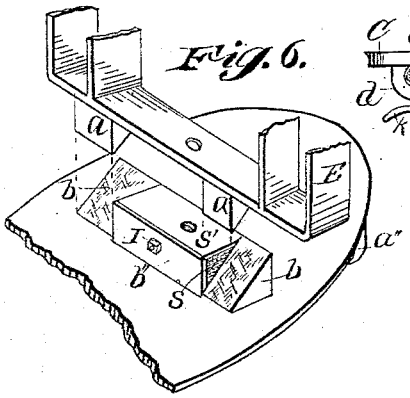


Fig. 6.



Robert C. Reid

INVENTOR.

WITNESSES:
C. E. Adamson
L. A. Adamson.

BY Chas. E. Adamson
ATTORNEY.

UNITED STATES PATENT OFFICE.

ROBERT C. REID, OF LYONS, ASSIGNOR OF ONE-HALF TO RANDSOM A. REASE, OF MUNCIE, INDIANA.

ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 304,031, dated August 26, 1884.

Application filed March 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, ROBERT C. REID, a citizen of the United States, residing at Lyons, in the county of Green and State of Indiana, have invented a new and useful Roller-Skate, of which the following is a specification.

My invention relates to improvements in roller-skates; and the objects of my improvements are to construct a roller-skate having an adjustable bottom mechanism, so that the skate is secured to the shoe or boot by drawing the heel and toe plates together, and to construct a cheap and durable skate. I attain these objects by the mechanism illustrated by the accompanying drawings, in which—

Figure 1 is a side view of my invention. Fig. 2 is a view of the upper side of the skate bottom, and Fig. 3 is a view of the under side of the same. Fig. 4 is a view looking at the front end of a skate. Fig. 5 is a cross-section of the adjustable bottom part, taken on line *x x;* and Fig. 6 is a detail view of the hanger.

Similar letters refer to sim lar parts throughout the several views.

The rollers A B are secured to the hangers E E′ by axles H H′ in the usual manner. The upper sides of the hangers are provided with inclines *a*, as shown in Figs. 1 and 6. The under sides of the heel and toe plates are provided with similar inclines, *b*, with a piece of rubber, *s*, placed between them. The said rubber is held in place by metallic sides *b″*, bolt I, and by a metallic plate, *s′*, which works between the rubber and the hanger. When the hangers are in place, they are held by bolts F G. The under side of the connecting ends of the heel and toe plates are provided with lugs *d* and loops *i″*, through which the pins *c* and cog-bars *i* slide. (Most clearly shown in Fig. 3.) A coil-spring, *c′*, is placed around the pin *c*, as shown, so that they are inclined to press the heel and toe plates apart. One of the cog-bars is secured to the toe-plate D, and the other to the heel-plate C, as shown in Fig. 3, and work on each side of the cog-wheel *i′*. The said wheel is made to engage with the cogs in the bars, and it is held in place in the sleeve by the journal *g*, which passes through the upper and lower portion of the sleeve, and provided with a thumb-head on its lower end, so that it can be easily turned by the thumb and finger. Just under the cog-wheel *i* the ratchet-wheel *j* is secured, as shown in Fig. 5. A prong, *g′*, formed on one end of the lever *k*, is pressed into the notches in the wheel *j* by a spring, *k′*, as shown in Figs. 2 and 5. The lever *k* is pivoted to lugs *g″*, as shown, so that by pulling up on the outward end the prong *g′* is moved down out of the wheel *j*, allowing the springs *c′* to press the heel and toe plates apart until the keys in the ends of pins *c* touch the lugs *d*. The toe-plate D is provided with toe-clamps D′ D″, as shown. The said clamps are held to the toe-plate by lugs *n′*, which allow the said clamps to slide in and out freely. A screw, *m*, is passed through the lower ends, D″, of the clamps, and it is provided with a right and left thread and a center nut or collar, *n*. The said screw moves the clamps in opposite directions, (in and out,) and it is prevented from a longitudinal movement by the downward projections *o* on each side of the collar *n*, all as shown.

As thus constructed, the skate is secured to the foot by placing it on the shoe bottom, and first drawing the toe-clamps together by turning the collar *n* with the thumb and finger. Then by turning the thumb-head *g‴* in the same way the heel and toe plates are drawn together sufficient to press the heel-lugs *a″* into the shoe-heel, and, sliding the toe-clamps to a wider part of the shoe-sole, securely wedging the shoe between the said heel and toe-clamps. The bolts F G allow the hangers to turn slightly, and a side pressure or lateral inclination of the foot causes the skate to turn or run in a curved line, as the case with all scientific skates, and the rubbers *s* cause the hangers to assume their natural position, or to stand parallel with each other.

Having thus described my invention, I claim the following and desire to secure the same by Letters Patent:

1. In a roller-skate, the hangers E E′, inclines *a b*, sides *b″*, rubbers *s*, plate *s′*, and bolt I, in combination with the heel and toe plates, all for the purpose set forth.

2. The sleeve *e*, carrying a cog-wheel, *i″*, wheel *j*, journal *g g‴*, pawl *g′*, lever *k*, and spring *k′*, in combination with the pins *c*, lugs *d*, bars *i*, and loops *i″*, all for the purpose set forth.

ROBERT C. REID.

Witnesses:
RANDSOM A. REASE,
WM. R. BROTHERTON.