

(No Model.)

H. J. MOORE.

## ROLLER SKATE.

No. 306,029.

Patented Sept. 30, 1884.

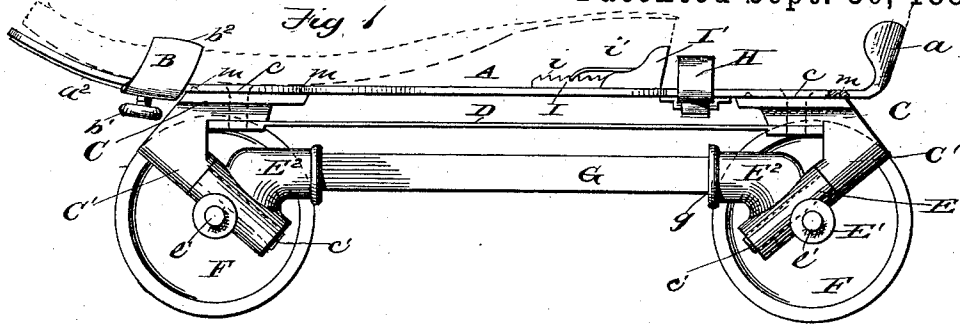


Fig. 2.

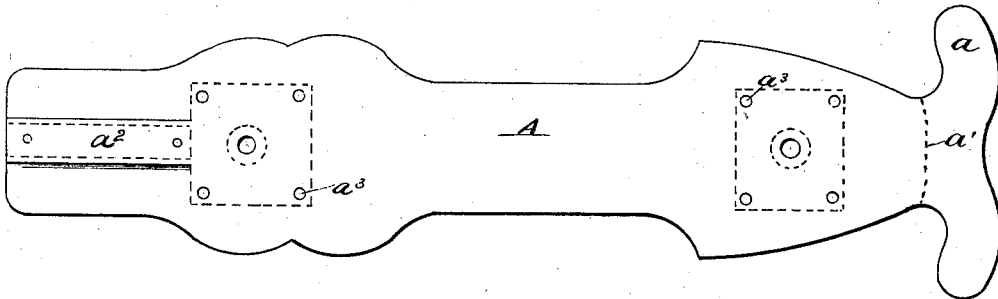


*Fig. 3.*

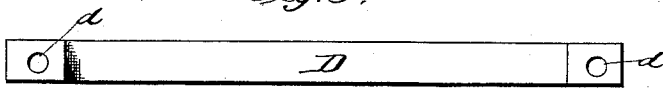


*Fig. 4*

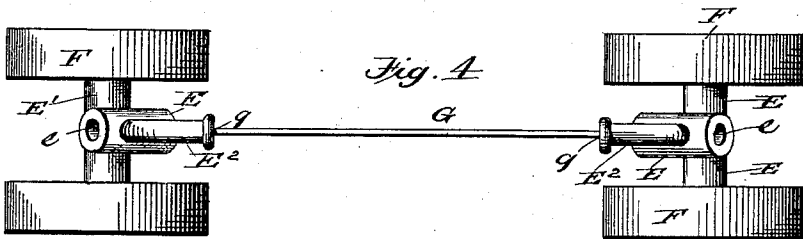


*Fig. 5.*

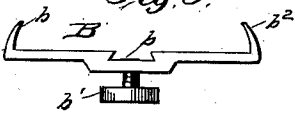


*Fig. 6.*

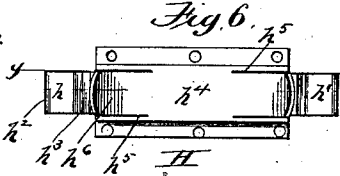
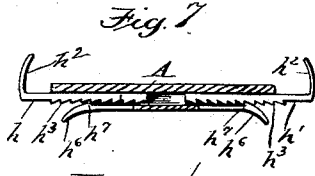


Fig. 7



Attest:

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# UNITED STATES PATENT OFFICE.

HOMER JOHN MOORE, OF FORT DODGE, IOWA.

## ROLLER-SKATE.

SPECIFICATION forming part of Letters Patent No. 306,029, dated September 30, 1884.

Application filed January 25, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, HOMER J. MOORE, a citizen of the United States, residing at Fort Dodge, in the county of Webster and State of Iowa, have invented certain new and useful Improvements in Roller-Skates; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to roller-skates; and it consists in certain new and useful improvements, hereinafter more fully described, and shown in the accompanying drawings, in which—

Figure 1 represents a side elevation of a roller-skate embodying my invention, with the wheels upon one side removed to show details of construction. Fig. 2 is a bottom plan view of the metallic top plate or foot-rest, the heel-clasp not having been bent upward. Fig. 3 is a plan view of the truss plate or bar. Fig. 4 represents the rollers or wheels, their supporting-castings, and the spring-bar that connects said castings. Fig. 5 is a detached edge view of the forward or toe clamp. Fig. 6 is a bottom plan view of the heel-clamp detached from the skate. Fig. 7 is a sectional view on the line *yy* of Fig. 6.

Similar letters of reference refer to like parts in the several figures.

In said drawings, A represents the top plate or foot-rest, preferably made of sheet-steel in the form shown in Fig. 2. *a* represents the heel-clasp, (shown in said Fig. 2 in flat position—i. e., not turned up, as in Fig. 1,) the dotted lines *a'* in Fig. 2 indicating the point at which the heel-clasp *a* is bent in turning it upward. The forward end of the plate A is curved upwardly, as shown, upon the lower surface of which is riveted a narrow steel plate, *a''*, having dovetail side edges for the attachment of the toe-clamp B. The clamp B is provided upon its upper surface, at the middle thereof, with a dovetail groove, *b*, into and through which the dovetail strip *a''* passes.

*b'* represents the thumb-screw, which passes

through the clamp B, its end bearing against the lower surface of the dovetail strip *a''*, whereby the clamp is held from lateral movement and at any desired point upon the strip *a''*. The outer ends of the clamp are turned upward (see Fig. 5) to hold the forward end of the skate to the foot.

C C' represent castings which are secured to the lower surface of the plate A, at the points indicated by the dotted lines in Fig. 2, by screws *c*, that pass through the plate A and castings C, and thence enter screw-threaded apertures *d* in a truss-bar, D, the ends of which extend below said castings, as shown in Fig. 1. The castings C are provided upon their upper surfaces, and at each corner thereof, with projecting spurs *m*, that enter corresponding recesses, *a''*, in the lower surface of the plate A, thus preventing the castings from turning. The castings are also provided, upon their lower surfaces, with downwardly-projecting portions C', having rods or studs *c'* projecting therefrom, substantially as shown in Fig. 1. The rods *c'* pass through apertures *e* in the axle-castings E.

E represents the axle-castings provided with laterally-projecting portions E', through which the axle-rod *e'* passes. The rollers F are mounted upon the ends of the rod *e'*, and bear against the ends of the projections E'. The castings E are further provided, upon their upper sides, with projecting portions E'', having mortises therein, into which the ends *g* of a spring-plate, G, pass. One of the ends *g* of the plate G is rigidly secured, while the opposite end has slight lateral movement, to allow the spring to yield when the sides of the plate are depressed to secure a rocking motion.

H represents the heel-clamp, constructed as follows:

*h h'* represent strips of steel having their outer ends, *h''*, curved or bent upwardly to bear against the outer surface of the heel, while their lower surfaces have corrugations or teeth *h''*, which extend from side to side of said plates, as shown.

*h'* represents a box or socket secured to the lower surface of the foot-plate A. The bottom of said box is cut backwardly for a short distance at each end and side thereof, as shown at *h''*, whereby spring-plates *h''* are formed, the

upper surface of each of which is provided with a tooth,  $h'$ , that engages with the teeth  $h^3$  of the strips  $h$   $h'$  and holds said strip in position.

5 I represents a narrow strip of metal having dovetailed side edges, and upon its upper surface a series of teeth,  $i$ , and is secured to the upper surface of the foot-plate A, its office being to guide and hold a sliding block, I', in  
10 position. Said block I' is provided upon its lower surface with a dovetailed groove, and is kept from backward movement by a spring-pawl,  $i'$ , that takes into the teeth  $i$  of the strip I. The block I' bears against the forward  
15 edge of the heel and prevents the foot from sliding when the skate is in position.

The operation of my improved roller-skate will be understood without further description.

20 I am aware that various modifications in the details of construction herein shown and described as an embodiment of my invention can be made without departing from the principle or sacrificing the advantages thereof, and  
25 I therefore hold myself at liberty to make such changes as fairly fall within the scope of my invention.

What I claim, and desire to secure by Letters Patent, is—

30 1. In a roller-skate, the combination of the foot board or plate, provided at its forward and rear ends, respectively, with castings having pivotal studs and connected by a truss-bar, with roller-axle bearings pivoted thereon and  
35 connected together by a spring plate or bar, substantially as herein described.

2. In a roller-skate, the combination of the foot board or plate, provided at its ends with castings having pivotal studs projecting therefrom, with axle-bearings connected together by  
40 a spring-plate, said spring-plate being rigidly attached to one of said axle-bearings and loosely connected to the other, whereby the foot-board is permitted to rock upon said bearings, substantially as described.  
45

3. In a roller-skate, the combination of the foot board or plate with a heel-clamp, H, having spring-plates  $h$   $h'$ , provided with upwardly-curved ends  $h^2$  and corrugated surface  $h^3$ , box  $h^4$  having its bottom formed with spring-plates  $h^6$ , having teeth  $h^7$ , substantially as herein described and set forth. 50

4. In a roller-skate, the combination of the foot board or plate A, having heel-clamp  $a$  and dovetail strip  $a^2$ , with a toe-clamp, B, constructed as described, and having longitudinal movement on the foot-plate, substantially as described. 55

5. In a roller-skate, the combination of the foot board or plate A, having heel-clamp  $a$  and adjustable toe-clamp B and dovetail strip  $a^2$ , with a dovetail strip, I, secured to said foot-plate, and provided upon its upper surface with teeth  $i$ , sliding block I' upon the strip I, said block adapted to be held at any desired  
60 position by a spring-pawl,  $i'$ , substantially as described. 65

6. In a roller-skate, the combination of the following elements, to wit: a foot board or plate, A, constructed as described, and provided with toe and heel clamps B, H, and I', castings C, secured thereto and connected together by a brace-rod, D, axle-bearing castings E, constructed as described, and connected together by a spring-plate, G, all constructed and operating substantially in the manner  
70 herein set forth. 75

7. The combination, with the foot board and plate C, having spurs  $m$ , of the casting C', and truss-bar D, which is lapped upon said casting, and is secured thereto and to the plate C and foot-board A by a bolt or screw,  $c$ , as and for the purpose set forth. 80

In testimony whereof I affix my signature in presence of two witnesses.

HOMER JOHN MOORE.

Witnesses:

C. P. BERRIAN,  
GUS. T. PETERSON,  
P. W. THURMAN.