

J. KING.
SKATE.

APPLICATION FILED APR. 5, 1906.

Fig. 1.

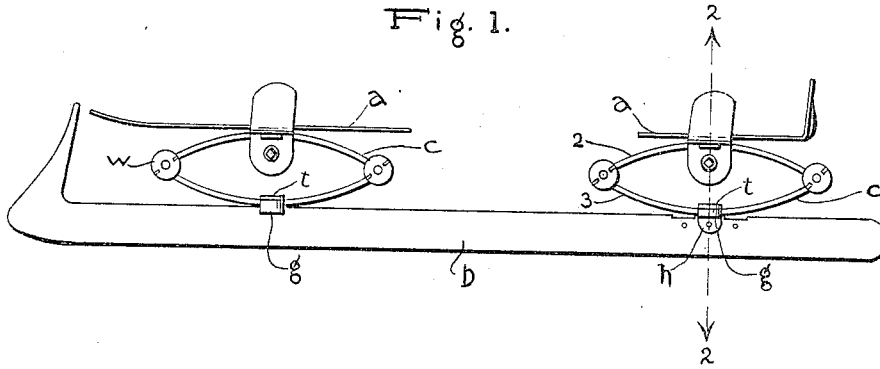


Fig. 2.

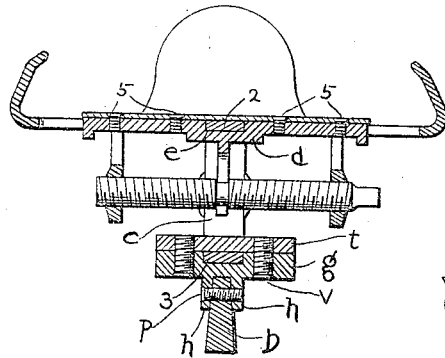


Fig. 3.

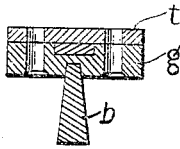


Fig. 4.

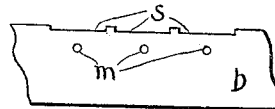


Fig. 6.

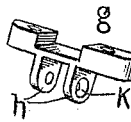
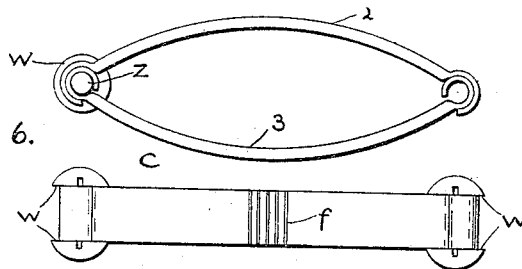


Fig. 5.

Witnesses

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SKATE.

No. 838,623.

Specification of Letters Patent.

Patented Dec. 18, 1906.

Application filed April 5, 1906. Serial No. 310,173.

To all whom it may concern:

Be it known that I, JOSEPH KING, a citizen of the United States, and a resident of Troy, in the county of Rensselaer and State of New York, have made a certain new and useful Invention in Skates; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it appertains to make and use the invention, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 is a side view of the invention as applied. Fig. 2 is a section on the line 2 2, Fig. 1. Fig. 3 is a detail sectional view. Fig. 4 is a detail side view of a section of the runner, showing the notches *s*. Fig. 5 is a detail perspective view of the part *g*. Fig. 6 shows detail side and plan views of the spring.

The invention has relation to skates; and it consists in the novel construction and combinations of parts, as hereinafter set forth.

In the accompanying drawings, the letter *a* designates the bearing-plates of the skate, and *b* the runner, which is connected to the bearing-plates by elliptical springs *c*. The branch 2 of the elliptical spring is held between the bearing-plate and a clamp-bar *d*, which is provided with a slightly-convex bearing *e* to engage the spring. Each spring branch is transversely scored, as at *f*, to assist in fixing its position. The clamp-bar *d* is secured to the bearing-plate by means of screws 5.

The lower branch 3 of the elliptic spring is seated in a bridge-piece *g*, which is secured to the runner. The front bridge-piece may be permanently secured or adjustable; but the rear bridge-piece, which supports the spring of the heel-plate, is removable and adjustable, and to this end is provided with parallel lugs *h*, which extend down on the sides of the runner and are provided with perforations *k*, which are designed to register with a perforation *m* in the runner, these perforations serving for the passage of a fastening-screw *p*. In order to hold the bridge-piece in exact position, the runner is provided with a shallow recess-seat *s* above the perforation *m*. The runner is designed to be provided with several of these seats near each other and with corresponding perforations, respectively, below them for adjustment of the bridge-piece, as in this way the size of the skate may be altered to fit shoes of different

sizes. The depression of the bridge-piece in the recess-seat also brings the bottom of the lower branch of the elliptic spring down to the runner, the construction being designed to facilitate the use of substantial springs without raising the bearing-plates of the skates too high for comfortable working. The lower branch of the elliptic spring is held to the bridge-piece by means of a convex bearing-cap bar *t*, which is secured to the bridge-piece by means of screws *v*, passing through perforations in said cap-bar and bridge-piece.

The ends of the branches of the elliptic springs are cylindrically bent to inclose one another around screw-pin connections *z*, having nuts *w*. Should a spring branch or other part connecting therewith be broken, the fastening-screws holding such spring branch or part may be loosened and such part taken out to be replaced by a similar part in working condition.

Having described the invention, what I claim, and desire to secure by Letters Patent, is—

1. In a skate, the combination with a runner having a series of transverse notches in its upper edge and a corresponding series of perforations below such notches, and a bearing-plate, of an elliptic spring having connection with said bearing-plate, and a clamp device engaging said spring and having engagement with a notch and a perforation of the runner.

2. In a skate, the combination with a runner having a series of notches in its upper edge and a corresponding series of perforations below such notches, and a bearing-plate, of a clamp device having connection with the bearing-plate and engaging a notch and a perforation of the runner.

3. In a skate, the combination with a runner having a series of notches in its upper edge and a corresponding series of perforations below such notches, and a bearing-plate, of an elliptic spring extending down to the horizontal upper edge of the runner, a bridge-piece engaging a notch and having bolt engagement with a perforation of the runner, said bridge-piece having connection with the elliptic spring, and means of connection for the elliptic spring and bearing-plate.

4. In a skate, the combination with a runner having a series of notches in its upper edge and a corresponding series of perforations below such notches, and a bearing-plate, of an elliptic spring having a scored

outer surface, means of connection between
 the elliptic spring and the bearing-plate, and
 a clamp device engaging the scored portion of
 said spring and having engagement with a
 5 notch and a perforation of the runner.

5. A skate-runner having a series of shal-
 low recess-seats on its upper edge and a cor-
 responding series of perforations below such

recess-seats and bridge-pieces in engagement
 therewith. 10

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

JOSEPH KING.

Witnesses:

A. L. McCONIHE,
 GEO. LANE.