(No Model.)

J. A. WHELPLEY.

SKATE.

No. 498,200. Patented May 23, 1893.

Fig. 1.

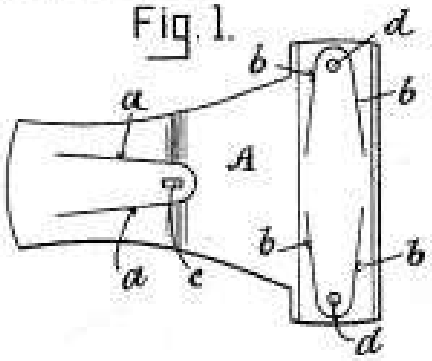


Fig. 2.

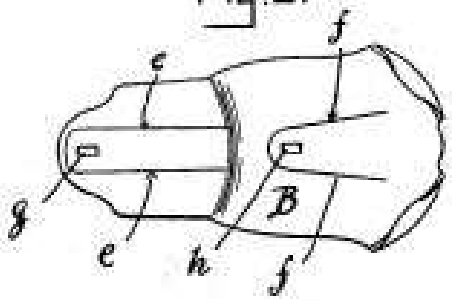


Fig. 3.

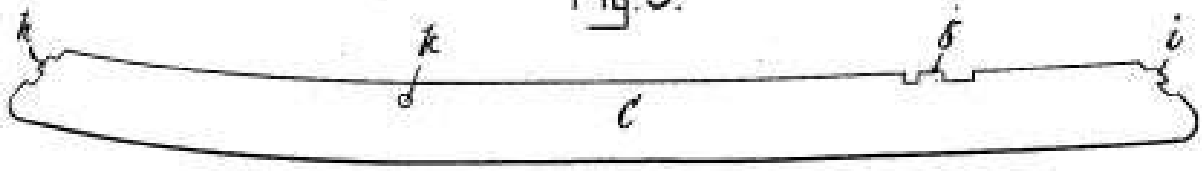


Fig. 4.

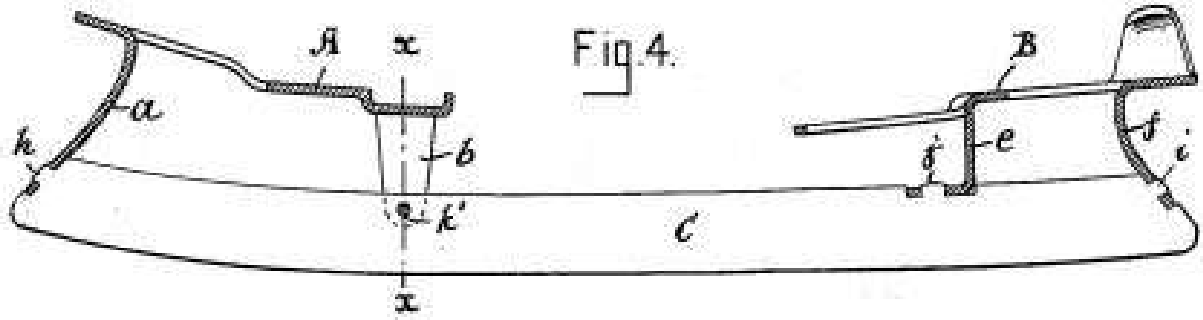


Fig. 6.

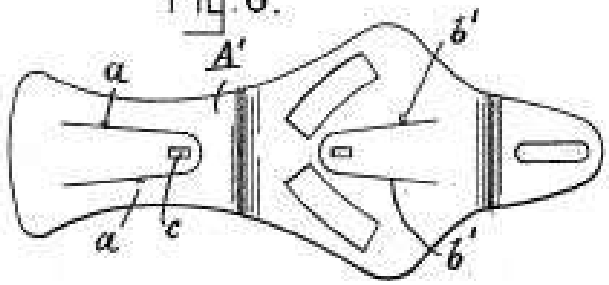


Fig. 5.

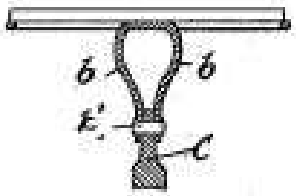
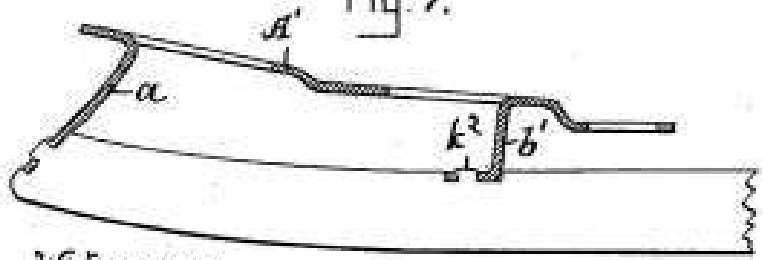


Fig. 7.



Witnesses.
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James A. Whelpley
by Edwin Clarke.
Attorney.

UNITED STATES PATENT OFFICE.

JAMES A. WHELPLEY, OF KEENE, NEW HAMPSHIRE, ASSIGNOR TO THE KEEN MANUFACTURING COMPANY, OF SAME PLACE.

SKATE.

SPECIFICATION forming part of Letters Patent No. 498,200, dated May 23, 1893.

Application filed May 16, 1892. Serial No. 433,090. (No model.)

To all whom it may concern:

Be it known that I, JAMES ALBERT WHELPLEY, a citizen of the Dominion of Canada, residing at Keene, in the county of Cheshire and State of New Hampshire, have invented certain new and useful Improvements in Skates, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to the method of securing the toe and heel plates of an ice skate to the runners whereby they can be more firmly attached and at a less cost than heretofore, and the invention consists in certain details of construction hereinafter fully described and pointed out in the claims.

Referring to the accompanying drawings: Figure 1— represents a toe blank as it appears when it comes from the dies. Fig. 2— is a similar view of a heel blank. Fig. 3— is a view of the runner. Fig. 4— is a view of the runner with the blanks secured thereto, the blanks being shown in section. Fig. 5— is a transverse section taken on line x, x, of Fig. 4. Fig. 6— is a view of a modified form of toe blank. Fig. 7— is a view of the same secured to the runner.

A, represents the toe blank which is stamped out into the form shown in Fig. 1, that is nicked or cut near the toe as shown at a, and also in the channel in which the toe clamps slide as at b, b. A rectangular hole c, is formed in the portion a, and a round hole d in each of the portions b. The heel plate B is also nicked or cut at e, f, similar to the toe plate. These portions are also stamped with rectangular holes g, h.

The runner C is formed of a straight piece of metal bent to the desired curve, and at the toe and heel has a portion cut out as shown so as to form a stud h, at the toe, and a stud i, at the heel. Near the rear end of the runner at its upper side it is also cut out to form a stud j, and near the toe portion it is formed with a hole k. After the toe piece has been stamped or cut out as described, the portion a is bent down so as to be at nearly right angles, and the portions b, bent down in a bow shape as will be best seen in Fig. 5, and when the toe plate is to be secured to the runner the hole c is first slipped over the stud h, and the pieces b, b are slipped over the runner, so that the holes d, d come opposite the hole k. A rivet k', is then passed through them and hammered down, the stud h, is then also hammered over, and the toe plate is securely held in place.

The heel plate B, after being stamped or cut as described has the rear piece f, bent down so as to project slightly rearward, and the piece e is bent down at about right angles to the plate, and then its end is again bent at right angles so as to stand horizontally with the plate. To secure the heel plate to the runner the hole h, is first passed over the stud i, then the hole g over the stud j. The studs are then hammered over and the heel plate is firmly secured to the runner.

As above described the toe plate is suitable only for that class of skates that have the toe clamps working in a groove standing at right angles to the runner, therefore in skates in which the toe clamps work in curved slots, the fastening of the rear portion of the toe plate A', has to be somewhat modified as shown in Figs. 6 and 7, in which the rear portion is only cut in one place b', and is bent down and secured to a stud k^3, on the runner, in the same manner as that described with reference to the front portion of the heel plate.

It will be seen that by this construction a great saving of material is effected as a runner of straight metal is used, that is to say of equal width bent to the required curve, and the toe and heel plates are held at the required height from the runner by the portions that are cut and bent down, thus the waste usual in skates with wide runners is prevented, and all building up from the straight runner is obviated.

What I claim is—

1. An ice skate runner of equal width throughout having a stud h, and hole k, in combination with a toe plate provided with downwardly projecting pieces a, b, the piece a, having a hole c, to fit the stud h, and the

pieces *b*, each having a hole *d*, whereby they can be riveted to the runner substantially as set forth.

2. An ice skate runner of equal width throughout, and having studs *i*, *j*, in combination with a heel plate having downwardly projecting pieces *e*, *f*, and holes *g*, *h*, for fitting over the studs *i*, *j*, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 3d day of March, A. D. 1892.

JAMES A. WHELPLEY.

Witnesses:
CHAS. STEERE,
EDWIN PLANTA.