L. W. KENNEY. SKATE.

Patented June 12, 1894. No. 521,375. 10a WITNESSES: Milliam Goebel. 6. Sedgwick BYATTORNEYS. THE NATIONAL LITHOGRAPHING COMPANY,

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LUKE W. KENNEY, OF NEW YORK, N. Y.

SKATE.

SPECIFICATION forming part of Letters Patent No. 521,375, dated June 12, 1894.

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To all whom it may concern:

Be it known that I, LUKE W. KENNEY, of New York city, in the county and State of New York, have invented a new and useful 5 Improvement in Skates, of which the following is a full, clear, and exact description.

My invention relates to an improvement in skates, especially to an improvement in ankle supports for skates, and in devices for attach-

10 ing the supports to the skates.

The object of the invention is primarily to improve upon the construction shown in the Letters Patent granted to me on June 21, 1892, No. 477,550, the improvements consist-15 ing in the simplification of the construction in the manner of attaching the ankle support to the heel of a skate, and in the character of the fastening devices employed to effect such a connection.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed

out in the claims.

Reference is to be had to the accompanying 25 drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of a skate hav-30 ing the improvement applied thereto, and illustrating the skate and improvement applied to the foot of a skater. Fig. 2 is a transverse section through the skate taken practically on the line 2—2 of Fig. 1. Fig. 3 is a 35 bottom plan view of the heel portion of the skate. Fig. 4 is a perspective view of the ankle support. Fig. 5 is a sectional detail view of the upper portion of the ankle support. Fig. 6 is a detail sectional view taken 40 practically on the line 6—6 of Fig. 2; and Fig. 7 is a perspective view of the heel plate employed in connection with the ankle support.

In carrying out the invention the stationary heel plate A, shown in Figs. 1, 2, and 3, is 45 such as is usually employed upon club skates, being provided with an upwardly extending clamping member α at its front end for engagement with the front face of the heel of a boot or shoe. The heel clamp B illustrated 50 in said views is likewise of the ordinary construction, and constitutes no portion of the

I heel plate A is employed an auxiliary heel plate 10, is used, which plate is preferably removably attached to the stationary heel plate, 55 as shown in Fig. 3, and the auxiliary plate extends both beyond the forward and side edges of the heel plate as shown in said figure. The auxiliary plate is provided at its forward end with an upwardly extending 60 flange 11, the said flange being provided in each end with a recess 11^a, preferably of a semi-circular character, as shown in dotted lines in Fig. 2. The auxiliary plate is further provided with a slot 12, adjacent to the 65 flange 11, through which slot the clamping member α of the heel plate projects upward. The plate 10 is adapted as a means for fastening an ankle support C to the heel plate of an ordinary skate; when however, the skate 70. is made to receive the ankle support shown in Fig. 4, the heel plate is constructed as shown in Fig. 7, comprising a body or bottom section 10^a, a front flange 11^b provided at its sides with recesses 11a, as in the auxiliary plate 75 heretofore described; and at a proper distance at the rear of the flange 11b a clamping member or stud 12^a is projected upward from the body of the plate, which clamping member or stud will correspond to the member a of the 80 ordinary heel plate, and the said clamping member 12^a of the improved heel plate may be struck up from the metal of which the plate is made. When the auxiliary plate 10 is used, the attachment between the ordinary heel 85 plate and said auxiliary plate is accomplished without injuring the heel plate, preferably as shown in Figs. 2 and 3, in which it will be observed that lugs 13 are formed at the side portions of the auxiliary plate upon the bottom 90 thereof, and each lug is made to carry a set screw 14, the inner end whereof is conically shaped and is adapted to engage with the under face of the heel plate at the side margins thereof.

The ankle support C consists of a yoke or body member 15, said yoke being substantially U-shaped, and its lower or bow portion if preferably flattened and provided at one side of its center with a headed stud 16, and too at the opposite side of its center with a set screw 17, the said screw being provided with a flanged head, and an extension 17a from the invention. When the ordinary stationary I head, provided with an aperture therein,

whereby the set screw may be turned by placing a nail or the equivalent thereof in the opening. The yoke has pivotally connected with its upper end two bow-shaped arms 18 5 and 18°, the said arms being made to face one another, and they are adapted to stand one in front and the other at the rear of the ankle of the skater, as shown in Fig. 1. Each bow arm 18 and 18a, is provided with a strap or ro like fastening device, said straps being designated respectively as 19 and 19a. The straps are provided one with a billet section at each end, and the other with buckles to receive the billet sections of the opposing strap, and both 15 straps are pivotally connected with the yokearm with which it is connected or upon which it is mounted, preferably by locating a metal eye upon the back or outer face of the strap through which the bow sections pass, and the 20 eye is prevented from moving past the central portion of the bow section to which the straps are connected by means of a guard 21, secured to each bow arm and embracing each eye 20.

25 The application of the ankle support may be quickly and conveniently made by simply loosening up the set screw 17 and placing the bow section of the body or yoke 15 in engagement with the inner face of the flange 11^b of 30 the improved heel plate, or the flange 11 of the auxiliary plate, and causing the stud 16 to enter one of the recesses 11° in the flange, while the set screw is tightened up as shown in Fig. 6, after being made to enter the op-35 posite recess 11^a in the flange until the flange portion of the head of the set screw engages

with the flange of the plate.

The yoke of the ankle support will be below the instep of the skater's foot, and con-40 sequently will not interfere with the heel of the shoe or with its application to the heel of the skate; and after the bow arms 18 and 18^a have been adjusted respectively to the front and rear of the boot or shoe of the 45 skater, the straps 19 and 19^a are fastened around the ankle.

It will be observed that the ankle support in no manner interferes with the free movement of the skate in direction of its ends, 50 but prevents side movement of the skate, and braces and strengthens said ankle when the skate is moved in direction of its sides, and when the skater is required to travel long distances.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

1. In a skate, the combination, with a heel plate, provided with a clamping member, of 60 an auxiliary heel plate provided with an open-

ing for the passage of the clamping member of the main heel plate and with a flange at its front end the said flange being provided with recesses in opposite ends, an ankle support the body portion of which is of yoke forma- 65 tion, and provided with a headed stud and a set screw at an interval apart corresponding to the distance between the recesses in the flange of the auxiliary heel plate, the said stud and set screw being adapted to enter 70 said recesses, as and for the purpose set forth.

2. The combination, with the heel plate of a skate, provided with a clamping member, of an auxiliary heel plate provided with an opening for the passage of the clamping mem- 75 ber of the main heel plate and with a flange at its front end the flange being provided with recesses in opposite ends, an ankle support, the body portion of which is of substantially U-shape, a stud provided with a head 80 located upon the body portion of the yoke at one side of its center, and a set screw located in the same portion of the yoke at the opposite side of the center, the said set screw being provided with a flanged head and an ex- 85 tension from the head adapted to be grasped by an implement to facilitate the manipulation of the set screw, the said screw and stud being adapted to enter the recesses in the flange of the heel plate, as and for the pur- 90 pose set forth.

3. As a new article of manufacture, an auxiliary heel plate for skates, formed with a forward clamping member for engagement with the heel of a boot or shoe, a flange in advance 95 of the clamping member adapted for attachment to an ankle support, and a slot between the clamping member and flange for the passage of the forward clamping member of a main heel plate, as set forth.

4. In a skate, the combination, with a heel plate and its forward clamp, of an auxiliary plate removably attached to the heel plate, provided with an opening for the upward passage of the forward clamp of the heel plate, 105 and a flange in advance of the said opening, adapted for attachment to the ankle support, as and for the purpose set forth.

5. In a skate, the combination with the heel plate thereof provided with a clamping mem- 110 ber, of an auxiliary heel plate apertured for the passage of the clamping member of the main heel plate, and provided with a flange on its front end, apertured lugs on its under side, and screws in said lugs, substantially as 115 described.

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Witnesses:

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