

O. EDWARDS.
Skates.

No. 154,175.

Patented Aug. 18, 1874.

Fig. 1.

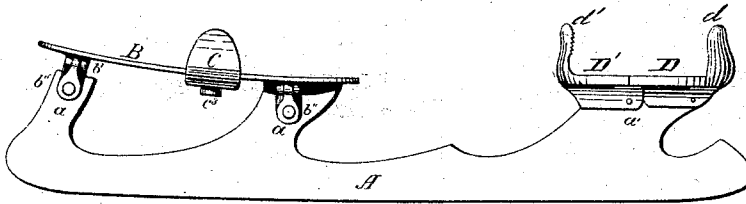


Fig. 2.

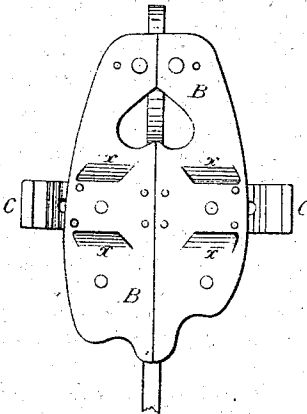


Fig. 4.

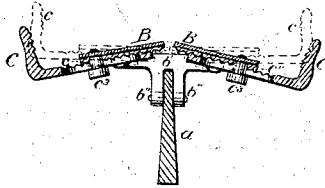


Fig. 3.

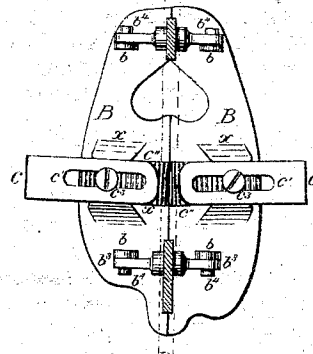


Fig. 5.



Fig. 7.

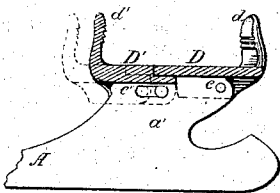


Fig. 6.

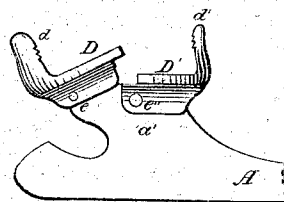


Fig. 8.

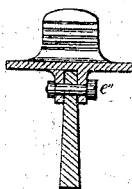


Fig. 9.

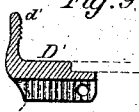
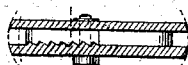


Fig. 10.



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UNITED STATES PATENT OFFICE.

OLIVER EDWARDS, OF FLORENCE, ASSIGNOR OF THREE-FOURTHS HIS RIGHT
TO J. DWIGHT KELLOGG, JR., OF NORTHAMPTON, MASSACHUSETTS.

IMPROVEMENT IN SKATES.

Specification forming part of Letters Patent No. 154,175, dated August 18, 1874; application filed
July 22, 1874.

CASE A.

To all whom it may concern:

Be it known that I, OLIVER EDWARDS, of Florence, in the county of Hampshire, in the State of Massachusetts, have made certain Improvements in Skates, of which the following is the specification:

The object of this invention is to improve upon the skate patented to J. D. Kellogg, Jr., numbered 149,225, and dated March 31, 1874; and it consists in the difference in construction from the above-named patent in the matter of clamping the skate to the sole of the boot or shoe, as will be more fully hereinafter described.

In the drawings, Figure 1 represents a side view of the skate; Fig. 2, a top view of the toe-plate and clamps; Fig. 3, a view of the bottom of same; Fig. 4, a transverse section of same; Fig. 5, a top view of heel-support; Fig. 6, a side view of same in position to receive the heel of the boot between the serrated clamps; Fig. 7, part section of same, to show adjustment of the clamp; Fig. 8, transverse part sectional view of rear part of heel-clamp; Figs. 9 and 10, modification of adjustment of heel-clamp.

A represents the runner of a skate, with its risers *a a* and *a'*. B represents the longitudinally-divided plate for the support of the toe or ball of the foot, forming two leaves, and on the under side of each leaf are riveted downwardly-projecting lugs *b b*. *b' b'* are brackets that extend outwardly and horizontally from each side of and above the top of the risers *a*, and are grooved on their underends to receive the risers *a*, and to which they are secured by rivets or screws that pass through the lower limbs *b'' b''* of the brackets *b' b'* and the risers of the runner, as seen in Figs. 1 and 4. The horizontally-extended parts *b³* of the brackets *b'* are pivoted to the lugs *b* on the leaves of plate B by pins or screws *b⁴*, so that the leaves of plates B will freely hinge or partially rotate thereon. C C are angular and slotted clamps, to take hold of the edge of the boot-sole at the ball of the foot, and, by the toothed or serrated edges *c*, hold the skate fast to the boot, when the clamps are

caused to bear hard upon the edge of the sole and freely slide between guideways X X. *c' c'* are slots through the angular clamps in order to adjust the clamps C to the different widths of boot-soles. *c'' c''* are serrated plates riveted fast to the under side of each leaf of plate B, with the serrations on the under sides, which serrations fit into corresponding serrations on the upper side of the angular clamps C. *c³ c³* are holding-screws that go through the slot in clamp C and screw into the serrated plate *c''* and plate B, and so as to hold the clamps C to any adjustment desired.

By this construction of plate B and the clamp-pieces C, and the clamps adjusted to the proper width to take a firm hold of the edge of the sole, and their outer sides swung down in position, as seen in Fig. 4, the boot placed on the plate and the weight of the person forces the leaves of plate B into horizontal position, as seen in dotted lines in said Fig. 4, the skate will be permanently fixed to the boot and remain so until the weight is removed and the clamps swing down to relieve their hold upon the sole of the boot.

The heel plate or support is divided transversely, of which D is a hinged rear part, and is pivoted, at *e*, to the riser *a'* of the runner A by its slotted parts, that fit upon each side of the riser, and are pivoted thereto by a pin or screw, so as to turn partially over, as seen in Fig. 6, and has upright, or nearly upright, serrated clamps, *d d*, rising from near the rear side of the heel plate or support, as seen in Fig. 5. D' is the other part of the heel-support, and is similar to D in its construction, except that it is not pivoted or hinged, but moves horizontally and forward upon the risers *a'*, to adjust the distance that the serrated clamp *d'*, that rises upward from the forward side of the plate, shall be from the rear clamps *d*, to accommodate the size of the boot-heel by means of a horizontal slot, *e'*, in the riser and a holding-screw, *e''*, that goes through one of the ears that drop beside the riser through the slot in the riser, and screws into the ear on the opposite side of the riser, so

that when the clamp d' on part D' is adjusted and held at the right distance from the clamps on part D and D , turned over to the position seen in Fig. 6, the position of the clamps is ready to receive the heel of the boot, and when the weight of the person is put upon the heel the part D will assume a horizontal position, as seen in Fig. 7, and firmly clamp the heel of the skate fast to the heel of the boot.

Other constructions for adjusting the heel-clamps to the size of the boot-heel may be used, as, for instance, one or both of the ears of part D' , that drop down on the sides of the riser, may be serrated so as to fit into serrations on the riser or to a secondary serrated plate, and, when adjusted to the right place,

be held by a holding-screw, as seen in Figs. 9 and 10.

Having thus described my invention, what I claim is—

1. The transversely-divided heel support and clamp, one part, D' , adjustable longitudinally on, and the other part, D , hinged to, the riser a'' of runner A , substantially as and for the purposes described.

2. The combination of the hinged and longitudinally-divided plate or foot-rest B , serrated plates c'' , and adjustable slotted and serrated sliding clamps C , constructed and arranged to operate substantially as described.

Witnesses: OLIVER EDWARDS.

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