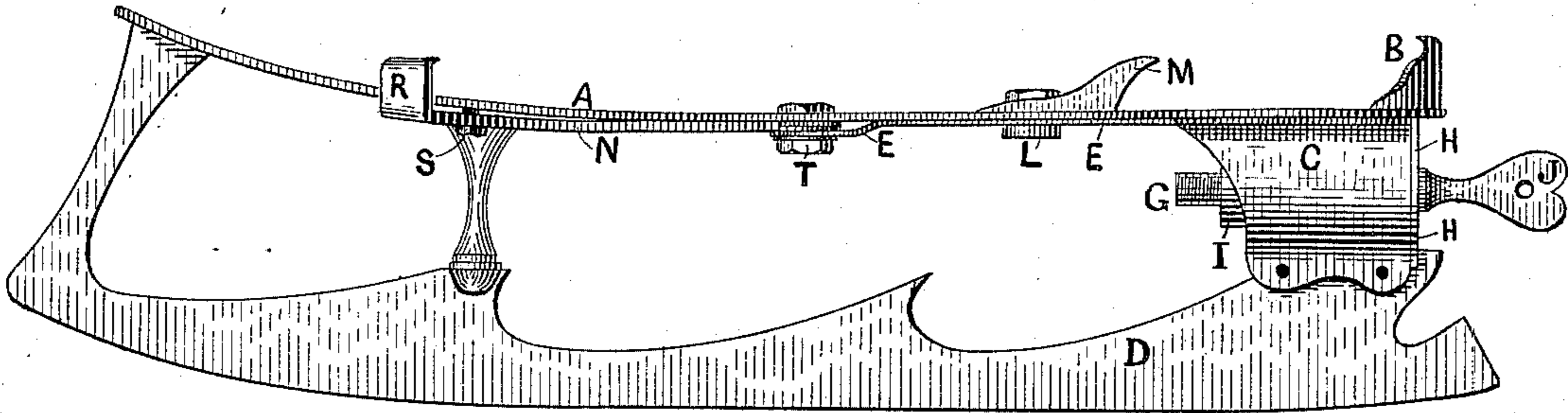


(No Model.)

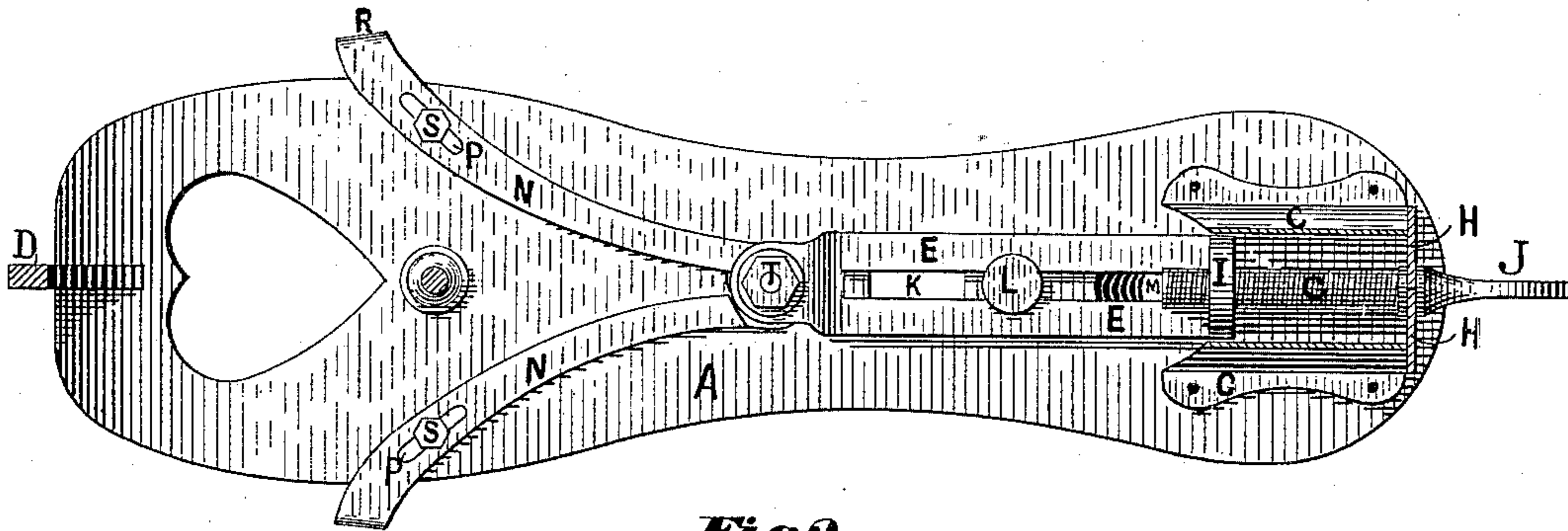
U. OLSEN.  
SKATE FASTENING.

No. 334,975.

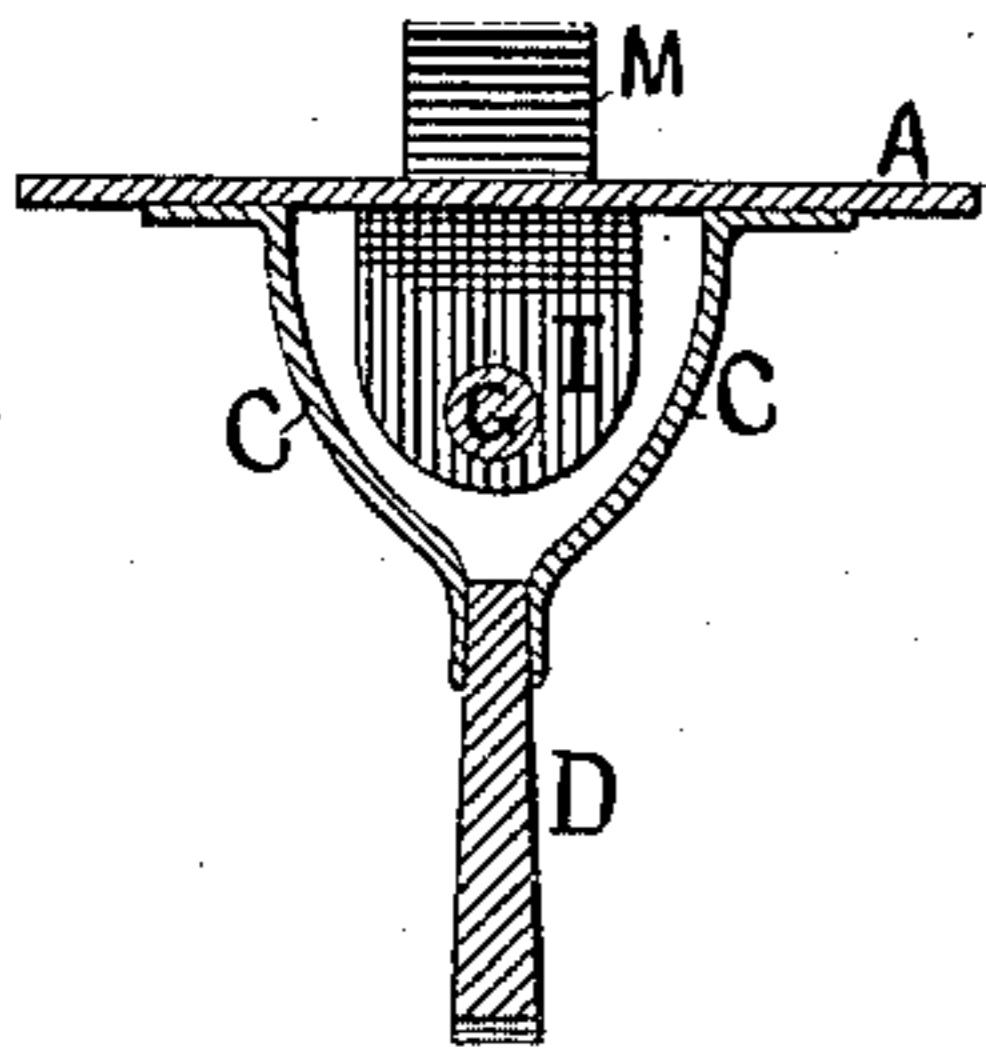
Patented Jan. 26, 1886.



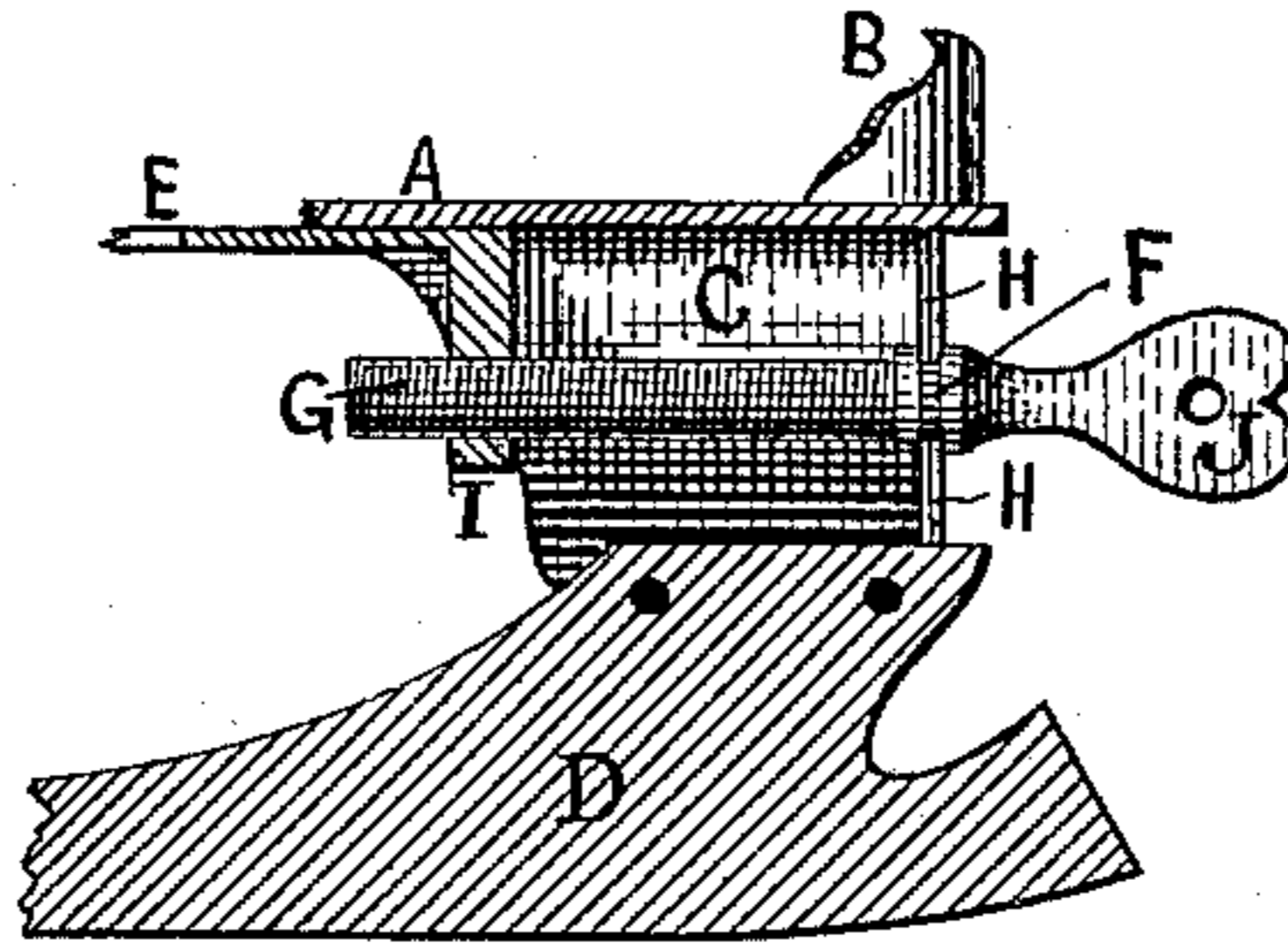
*Fig. 1.*



*Fig. 2.*



*Fig. 5.*



*Fig. 4.*

**Witnesses:**

*William H. Parry*  
*W. R. Marble*

**Inventor:**

*Ulrik Olsen,*  
*by Sylvanus Walker*  
*Attorney*

# UNITED STATES PATENT OFFICE.

ULRIK OLSEN, OF BOSTON, MASSACHUSETTS.

## SKATE-FASTENING.

SPECIFICATION forming part of Letters Patent No. 334,975, dated January 26, 1886.

Application filed December 12, 1885. Serial No. 185,530. (No model.)

*To all whom it may concern:*

Be it known that I, ULRIK OLSEN, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Skate-Fastenings, of which the following is a specification.

The object of my invention is to provide a cheap, simple, efficient, and convenient skate-fastening, which may be adjusted to the various sizes of boot heels and soles, and secured thereto in a very expeditious and permanent manner; and it consists in the construction, combination, and arrangement of the several parts of the fastening as hereinafter more fully described, and specifically set forth in the claim.

Figure 1 represents a side elevation of a skate-fastening constructed according to my invention. Fig. 2 represents a sectional plan showing the under side of the plate and fastening connected therewith. Fig. 3 represents a vertical cross-section at the heel portion of the same. Fig. 4 represents a vertical central longitudinal section of the heel portion of the same.

A represents the foot-plate of the skate, to the heel end of which is permanently secured the vertical projecting spur-points B, adapted to slightly enter the rear face portion of the heel of a boot when the skate is fastened to the same at a point or points a short distance from the center of the boot-heel, as heretofore. The rear end portion of the foot-plate A has secured to the under side thereof the curved downward-projecting support-plates C, their lower end portions being secured to opposite sides of the skate-runner D by means of rivets, as shown. These plates C form a hollow passage, within which the rear downward-projecting end I of the horizontal longitudinal sliding clamp-bar E may be moved back and forth by means of the clamp-screw G, the screw-threaded portion of which fits within a screw-threaded opening or hole formed through the said projecting right-angle portion I of the said sliding clamp-bar E, and at the rear end portion of the said screw-threaded portion is formed a groove, F, within which is fitted the meeting edges of the rear vertical end plates, H, one at each side of the said clamp-screw G, which is adapted to turn

therein or be rotated by the fingers when applied to the flattened rear end portion, J, thereof, which is provided with an opening or hole, within which may be inserted the handle end of a pocket-wrench or other suitable device to turn the screw with greater force, so as to clamp the skate more firmly upon the sole of the boot, as described. The upward ends of these guide-plates H are secured to the foot-plate A by riveting or any other suitable manner, and are fitted against the rear end faces of the said curved plates C, as shown. The said sliding clamp-bar E is provided with a longitudinal slot, K, within which the short clamp-bolt L is fitted, so as to permit the said clamp-bar E to slide thereon. The upper end of the said clamp-bolt L is provided with the adjustable sliding dog M, which is curved rearward at its upper end, and sharpened or somewhat pointed, so as to pierce or slightly enter the inward face of the boot-heel as the skate is clamped thereon. Now, in order that the sliding dog M may be adjusted upon the said sliding clamp-bar E so as to fit different-sized boot-heels, the said clamp-bolt L is provided with shoulders and a screw-threaded nut, so that its position on the said clamp-bar E may be adjusted and moved back or forward on the clamp-bar by sliding the said bolt L in the slot K of the bar E, and securing it in such position by means of the said fastening-nut. It will be seen that the said foot-plate A is provided with a longitudinal slot corresponding with the slot K, formed in the sliding clamp-bar E, to the forward end of which sliding clamp-bar is pivoted the rear ends of the opposite side-curved oblique sliding clamp-bars N, the forward ends R of which are bent upward, and project a short distance above the top of the foot-plate A, and then are bent inward, so as to grasp the opposite edges of the boot-sole toward the toe portion, as heretofore. The said curved sliding clamp-bars N are provided with short slots P, near their forward ends, and are retained in position upon the foot-plate A by short screws or bolts S, inserted through the slots P and into the said plate A, as shown in Fig. 2. The curved oblique sliding clamp-bars N are each pivoted to the forward end of the straight sliding bar E by a short screw-bolt, T, which

passes through holes formed through the ends  
 of the same, and in a short slot formed through  
 the said foot-plate A, whereby the skate be-  
 ing adjusted to the size of the boot and placed  
 5 in position upon the same, and the clamping-  
 screw G turned in the proper direction, the  
 clamp-dog M takes hold of the face of the front  
 of the heel, and the spur-points B are set into the  
 rear face of the same, and oblique clamp-bars  
 10 N are drawn inwardly at their forward ends,  
 and thus their hooked projecting ends R grasp  
 the edge of the sole of the boot toward the toe  
 portion, and thus secure the skate firmly in  
 position thereon. It will be seen and under-  
 15 stood that the said actuating clamp-screw G,  
 provided at the heel of the skate, is in posi-  
 tion to be turned by means of the fingers of  
 the skater in a very convenient and expedi-  
 tious manner so as to actuate all three of the  
 20 holding-dogs or clamping devices at one and  
 the same time, and that by passing any suit-  
 able device through the opening in the out-  
 ward end of the clamp-screw G great press-  
 ure can be easily brought to bear upon the

sole and heel of the boot, so as to cause the 25  
 clamps to hold the skate on the same with  
 great security and firmness.

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

The skate-fastening consisting of the com- 30  
 bination of the curved plates C, vertical plates  
 H, clamp-screw G, provided with a groove,  
 F, and sliding bar E, having the slot K, and pro-  
 vided with the bolt L and adjustable sliding 35  
 dog M, and having pivoted to the forward  
 end thereof the curved oblique sliding clamp-  
 bars N, having slots P, provided with bolts S,  
 and having hook ends R, all being construct-  
 ed and arranged to operate with the foot- 40  
 plate A, provided with a longitudinal slot, and  
 having spur-points B, substantially as shown  
 and described.

ULRIK OLSEN.

Witnesses:

SYLVENUS WALKER,  
 M. B. WALKER.