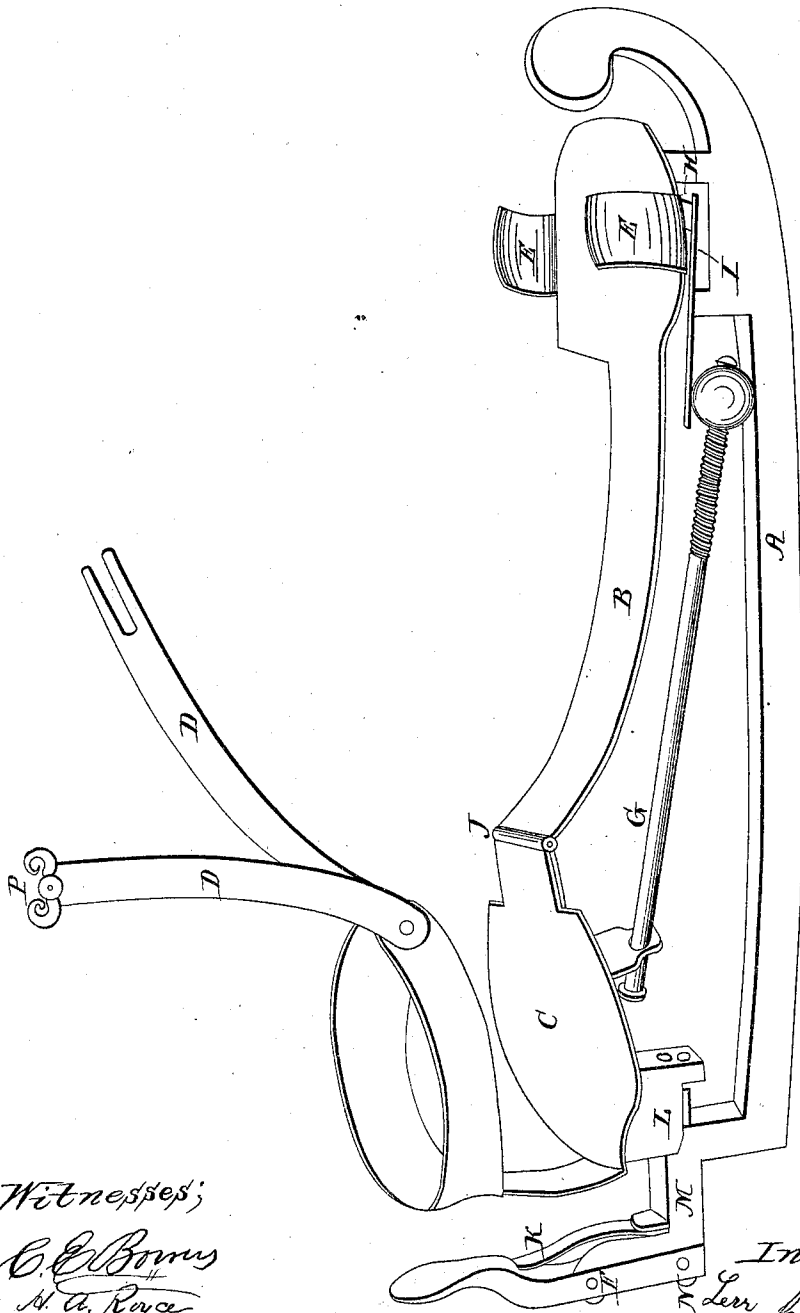


L. J. Masterson,

Skate.

N^o 30237.

Patented Oct. 2, 1860.



Witnesses;

C. E. Bonny
N. A. Royce

Inventor;

L. J. Masterson

UNITED STATES PATENT OFFICE.

LEVI J. MASTERSON, OF NEWTON, MASSACHUSETTS.

SELF-ADJUSTING SKATE.

Specification of Letters Patent No. 30,237, dated October 2, 1860.

To all whom it may concern:

Be it known that I, LEVI J. MASTERSON, of Newton, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Skates, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, making part of this specification, in which is represented a side view of my improved skate.

My present invention consists in a skate the spring foot piece of which is locked in position on the runner, by the downward pressure of the foot, when the skate is applied to the foot; and in combination therewith of adjustable toe clamps for holding the front part of the boot to the skate, which clamps are drawn back and tightened to the foot by the descent of the heel part of the foot piece, by which I obtain a skate which is readily applied to the foot of the wearer, and is particularly easy and comfortable to skate on.

That others skilled in the art may understand and use my invention I will proceed to describe the manner in which I have carried out the same.

The skate represented in the said drawings is made of metal, and has a runner A the rear end of which is formed with an angle or elbow M, to the back part of which is pivoted a lever F which is held in the position shown in the drawings by a spring K attached to the part M of the runner and bearing against the top of the lever.

The foot piece B which is a long bent spring is secured to the runner A by a standard H and has pivoted to it at J the heel piece C. On each side of the front part of the foot piece B is a clamp E. These clamps slide longitudinally in suitable bearings attached to the underside of the foot piece, and are drawn back toward the heel to make them clasp the sides of the boot of the skater, in the following manner: A sliding rod I attached to the clamps E is connected with a round nut on a screw shaft or rod G, which passes through and turns in a stud descending from the underside of the heel piece C (the rod has a head on it to prevent its being drawn through the stud). A block L attached to the underside of the heel piece C slides upon the portion M of the runner, being dovetailed or recessed to receive the runner. A bolt N attached to the lower end

of the lever F plays longitudinally in a hole in the part M of the runner, and projects beyond the front side of it. A hole O in the piece L is intended to receive this bolt when the piece L is pushed back to the rear end of the part M. A short standard rises from the rear end of the heel piece C to which are attached two metal bands D which pass over the instep of the foot and are there secured by a thumb screw or nut P.

The following is the manner in which this skate is applied to the foot of the wearer: The toe of the boot is entered between the clamps E, and the heel is brought down onto the heel piece C which is vibrated on its bearing M the front part J of it descending against the resistance of the spring B. This moves the piece L back on the part M of the runner. As this motion takes place the bolt N is thrust back and the lever F is vibrated, but when the piece L reaches its seat at the back of the part M, the bolt N slips into the hole O and locks it in its place, the bolt being held by the pressure of the spring K on the lever F. As the front part of the heel piece C descends, the stud on the underside of it is drawn back and with it the rods G and I. This draws the clamps E back tight against the wide part of the foot. The metal straps D are now brought over the instep, where they are secured by the nut P. As the wearer now throws his weight upon the skate in the act of skating, the spring B relieves the concussion which would be felt on a rigid metal skate, and his movements are rendered more free and less fatiguing.

While I obtain by the above construction of skate the advantages of the spring foot piece, the skate is easily and quickly applied to the foot; and may be adjusted (by turning the nut on the screw rod G) to suit feet of different sizes.

What I claim as my invention and desire to secure by Letters Patent is—

1. The spring foot piece C, J, B locked to the runner A by the pressure of the foot, substantially as set forth.

2. The clamps E operated by the descent of the heel piece C substantially in the manner described.

LEVI J. MASTERSON.

Witnesses:

CHAS. B. F. ADAMS,
C. E. BOWERS.