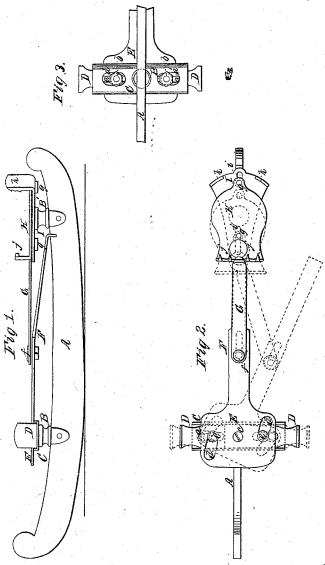
J. Forbes, Skale,

Nº 66,3/6.

Patented July 2,1867.



Witnesses. FA Jackson Theo. Tusch Inventor.

## Anited States Patent Office.

## JOHN FORBES, OF NEW YORK, N. Y.

Letters Patent No. 66,316, dated July 2, 1867.

## IMPROVED SKATE.

The Schedule referred to in these Betters Patent and making part of the same.

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, John Forbes, of the city, county, and State of New York, have invented a new and useful improvement in Skates; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of my invention.

Figure 2, a plan or top view of the same. Figure 3, an inverted plan of a portion of the same.

Similar letters of reference indicate like parts.

This invention relates to a new and improved fastening for securing skates to the feet, whereby skates may with the greatest facility be firmly secured to the boot or shoe, and very readily detached from it when required. The fastening is of that kind in which straps are dispensed with, and the skate clamped to the sole and heel of the boot or shoe.

A represents the runner of the skate, which may be constructed in any of the known forms, and B B' are two posts or standards secured to the runner, one, B, near its front, and the other, B', near its rear end. To the front post B at its upper end there is secured, horizontally and transversely with the runner A, a guidebox, C, of oblong form, and composed of a sheet-metal plate, (steel would be the preferable material,) bent upward at its front and rear sides, and in this box two jaws, D D, are placed, and allowed to slide freely. These jaws are also of metal, and of right-angular form, their lower horizontal parts being fitted in the box C, and their upper or vertical parts serrated at their inner surfaces, so that they may grasp firmly the sides of the sole of the boot or shoe. The jaws D have each an oblong slot, a, made in their lower horizontal parts, and similar slots, a', are made in the bottom of the box C for bolts b to pass through, said bolts serving as guides for the jaws, and the bolts and oblong slots admitting of the jaws being adjusted further in or out, to suit the width of the sole of the boot or shoe to which the skate is to be applied. E represents a plate, which is secured by a screw or pivot-bolt, c, to the centre of the box C, and has two slots, d, made in it, slightly curved, one in advance, and the other in rear of the line of the screw or pivot-bolt c, (see fig. 2,) and heads c, which are on the bolts b, one fitted in the slots d.

It will be seen from the above description that by turning the plate E the jaws D D will be moved simultaneously outward from and inward towards each other. The plate E is formed with an arm, F, which extends towards the rear of the runner, and is connected by a bolt, f, with an arm, G, the rear end of which is made in circular form to fit into a corresponding-shaped recess in a sliding-plate, H, which is secured to a heel-plate, I, secured to the rear post B', the plate I being provided with pendent pins g to work in oblong slots i in the heel-plate, and serve as guides for the same. The front end of the plate H is bent upward, and provided with teeth j, projecting backward to penetrate the front side of the heel of the boot or shoe, while the rear end of the heel-plate I is provided with two fixed jaws, k k, one at each side, against which the rear of the heel bears. When the arm F of the plate E is turned or moved to one side, as indicated in red in fig. 2, the jaws D D will be moved outward, and the plate H drawn forward, and the skate is then adjusted to the sole and heel of the boot or shoe when the latter is on the foot of the wearer, and the arm F is then shoved back directly over and in line with the runner A, the rear end of arm F having a notch made in it to catch on the top of the runner. This adjustment of the arm F throws the plate I backward, so that the heel of the boot or shoe will be firmly clamped, while the jaws D D, being drawn inward, firmly grasp the sides of the sole. The plate I may be adjusted further forward or backward, to suit the size of the heel of the boot or shoe, in consequence of having the bolt f pass through an oblong slot, l, in the arm F.

The device is extremely simple, may be manufactured at a moderate cost, and there are no parts liable to get out of repair or become deranged by use.

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

1. The slotted guide-box C, in which the slotted jaws D are adjustably secured and operated by means of the centrally-pivoted plate E in the concentric slots d of which the end of the bolts work, all constructed and operating as herein set forth for the purpose specified.

2. The combination and arrangement of the longitudinally-sliding plate H, slotted plate I, arm G, and spring-arm F, pivoted slotted plate E, slotted jaws D, and slotted guide-box C, as herein set forth for the purpose specified.

JOHN FORBES.

Witnesses:

A. A. SMALLWOOD,

W. R. ANGWIN.