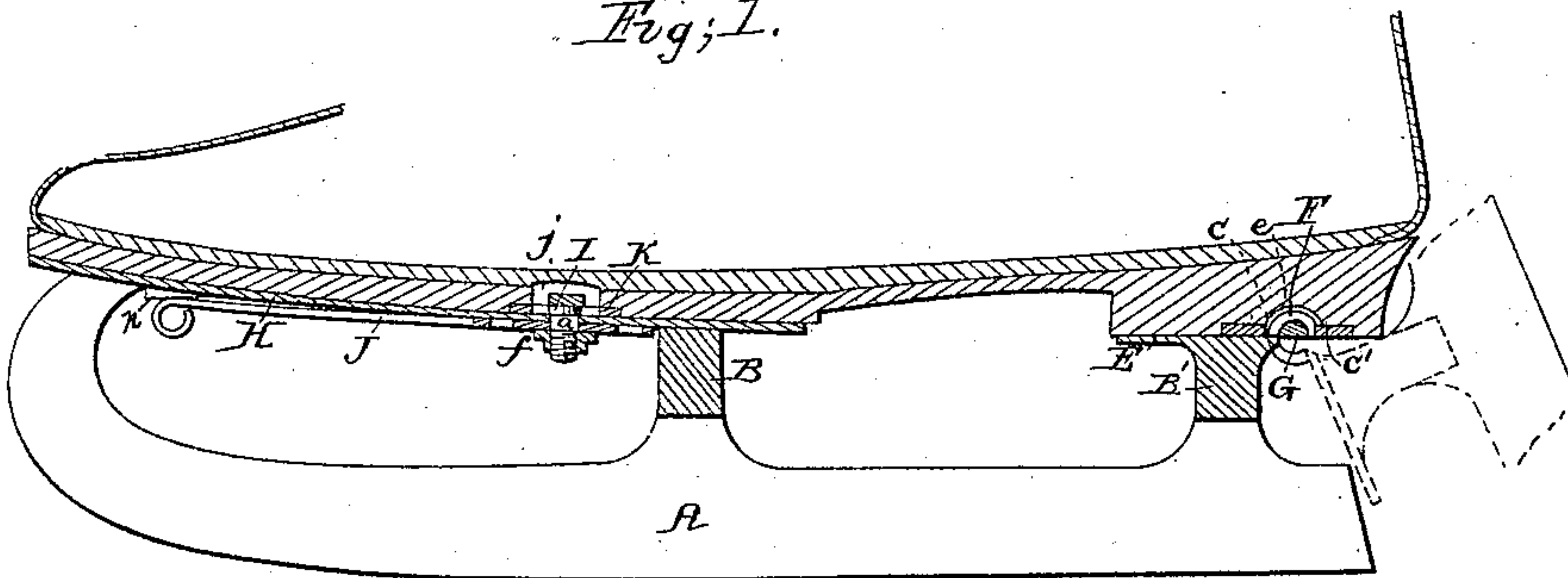


M. MAYDOLE.  
SKATE FASTENING.

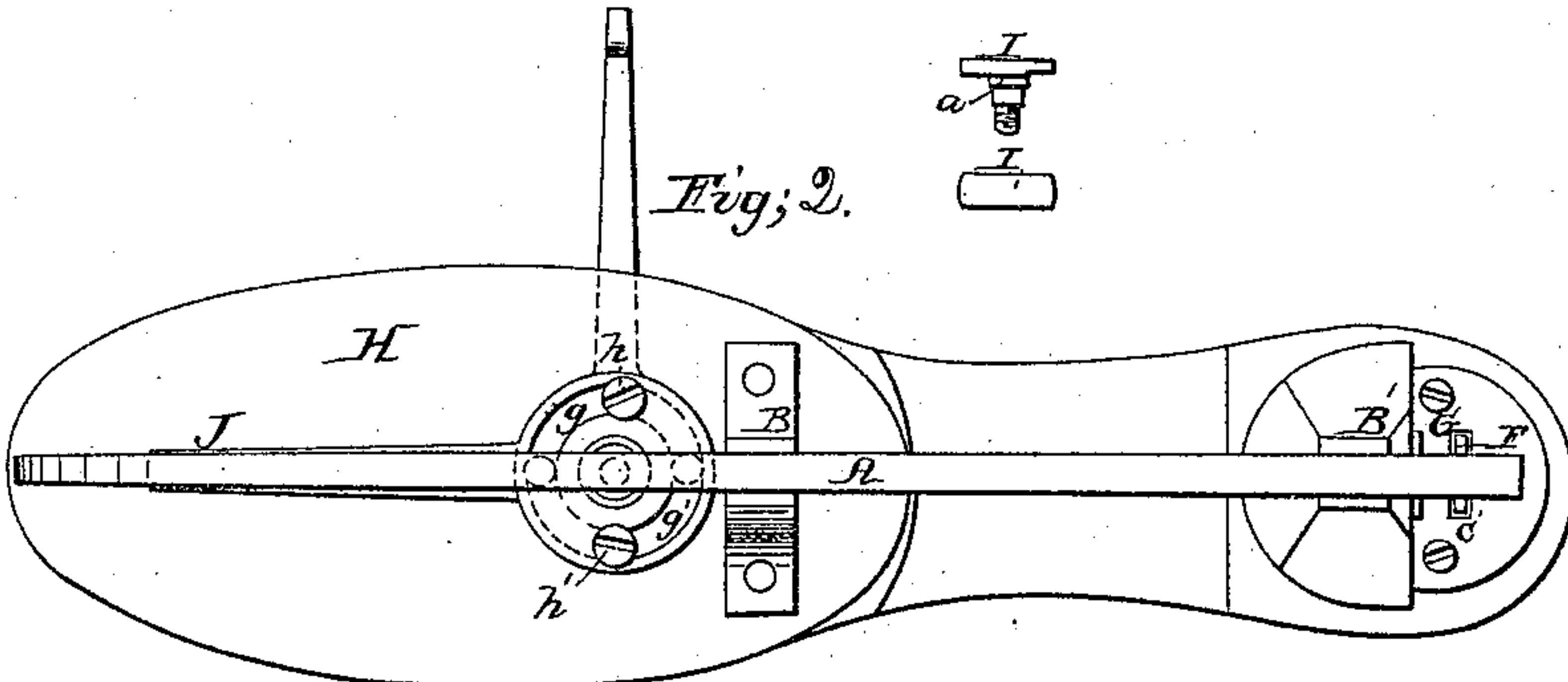
No. 36,470.

Patented Sept. 16, 1862.

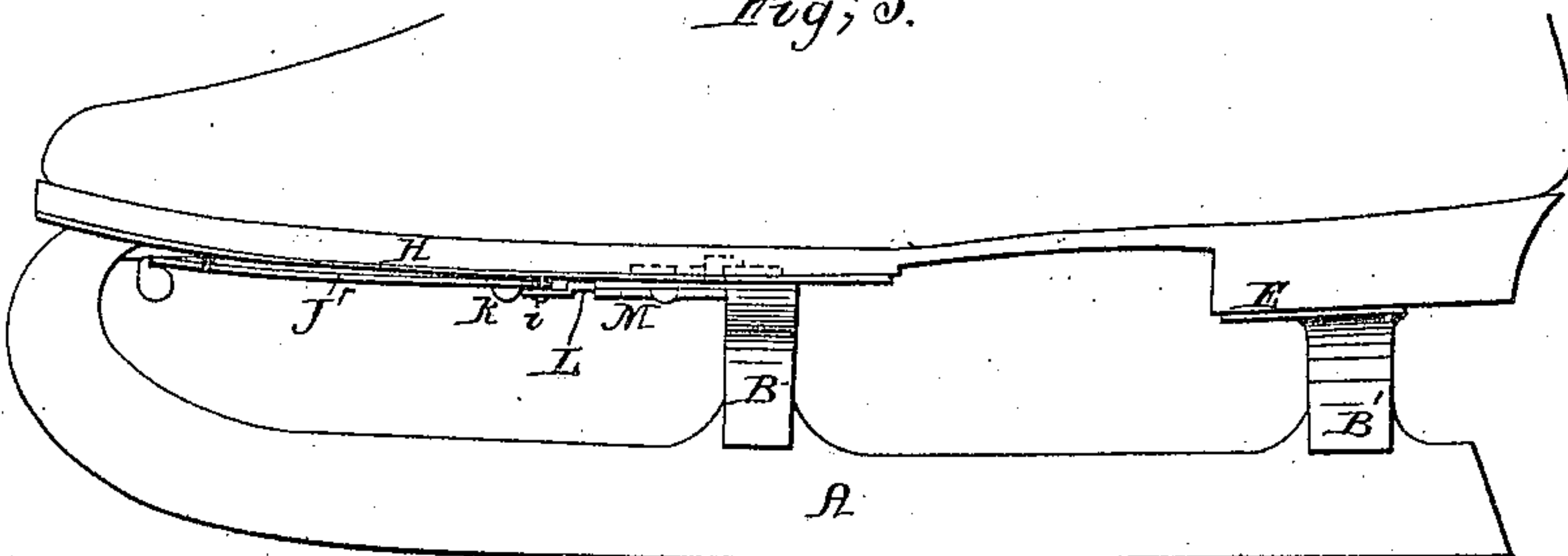
Fig; 1.



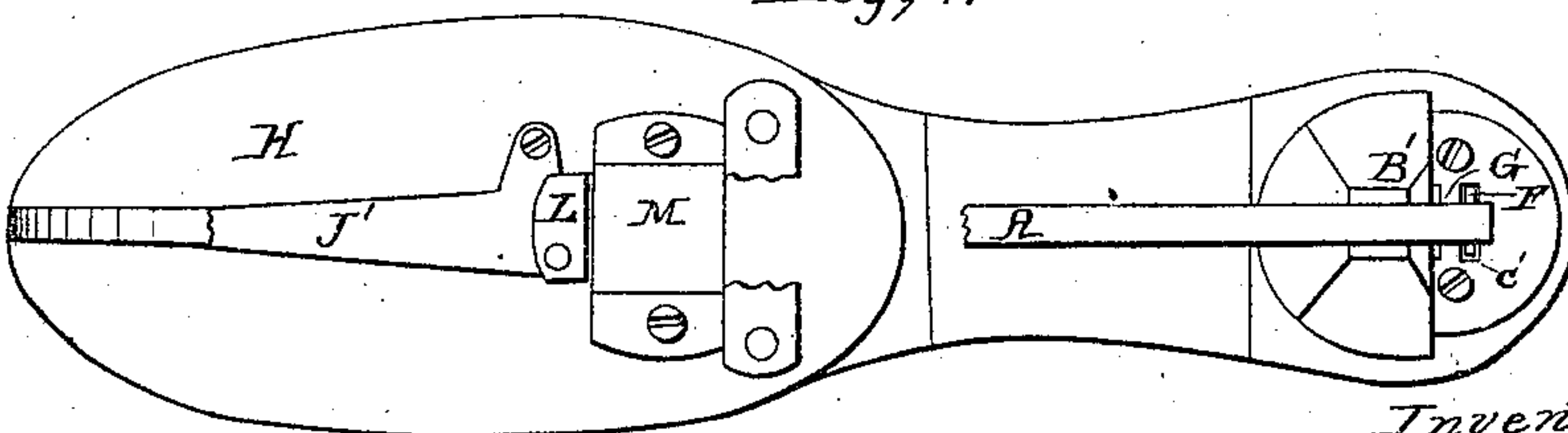
Fig; 2.



Fig; 3.



Fig; 4.



Inventor;  
M. Maydole



# UNITED STATES PATENT OFFICE.

DAVID MAYDOLE, OF NORWICH, NEW YORK.

## IMPROVED SKATE-FASTENING.

Specification forming part of Letters Patent No. 36,470, dated September 16, 1862.

*To all whom it may concern:*

Be it known that I, DAVID MAYDOLE, of Norwich, in the county of Chenango and State of New York, have invented a new and Improved Skate-Fastening; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal vertical section of a skate with my invention applied to it. Fig. 2 is an inverted plan of the same. Fig. 3 is a side elevation of a modification of the same. Fig. 4 is an inverted plan of the same, with a portion of the runner broken away.

Similar letters of reference indicate corresponding parts in the several figures.

This invention consists in having a hook at the back part of the heel-plate of the skate, adapted to catch over a bar attached to the heel of the boot or shoe to form a heel-fastening, and in having a T-shaped bolt which protrudes through the sole-plate of the skate, adapted to be turned in the slot of a plate attached to the sole of a boot or shoe to form a toe-fastening, the two devices combined forming a secure and reliable skate-fastening, as will be hereinafter fully explained.

To enable others skilled in the art to fully understand and use my invention, I will proceed to describe its construction and operation.

A represents the runner of the skate, which may be of the usual form, and B B' are two posts or knees, B being the front and B' the back post. The upper end of the back heel-post, B', terminates in a horizontal plate, E, on which the heel of the boot or shoe rests. This plate E may be of circular or other form. In this case its front part is circular, with a straight back edge, b, at right angles with the runner A, the heel-plate forming rather more than a semicircle. (See Figs. 2 and 4.) At the center of the back edge, b, of the plate E there is a hook, F, which may be made separately and attached to plate E, or be bent up and formed of a part thereof, a projection being left on the plate for that purpose. This hook may be of any desirable width, and its convex surface is its upper surface, as shown clearly in Fig. 1.

G is a plate of circular or other form, which has two parallel slots, c c, made in it at a suitable distance apart, forming what may be

termed a "staple" for the hook F to pass entirely through—that is to say, up through the innermost slot and down through the outermost one, as shown more clearly in Fig. 1. This plate G is secured by screws to the bottom of the heel of the boot or shoe, and is let into the heel, so that its under surface or face will be flush with it, and a recess, e, is made in the bottom of the heel of the boot or shoe to admit of the hook being passed through the slots c c, as shown in red in Fig. 1.

To the upper end of the front heel-post, B, and resting at its front end on the top of the runner, is attached a sole-plate, H, which corresponds with size and shape with boot or shoe upon which the skate is to be worn. The front end of the runner turns up in the usual manner and at its inner edge terminates in a prong, (not shown in the drawings,) which, fitting into a corresponding recess in the sole-plate, secures the front end thereof to the runner. Fitted to turn horizontally in the sole-plate H is a T-shaped bolt, I, which has a shoulder, a, formed on it, which rests upon the upper side of the sole-plate. The lower edge of this bolt protrudes through the sole-plate H, and is squared to allow a lever, J, which has a square hole through it, to be slipped over and secured thereon against a shoulder by a nut, f, which fits the screw-threaded end of the bolt I. The head of the T-shaped bolt I, on the under and opposite sides, is slightly inclined in opposite directions, for the purpose hereinafter to be explained. The end of the lever J which is secured to the bolt I is made in flat circular form and is furnished on opposite sides with two segment-slots, g g, of equal length. Through these slots protrude pins or screws h h, secured in the sole-plate H. The object of these pins or screws is to limit the movement of the lever in either direction. Consequently they act as stops. The front end of the lever J is bent in the form of an eye and has a longitudinal groove cut in its under side. This groove, when the lever is moved to occupy a position in line with the runner, fits over a corresponding ridge, n, on the sole-plate H, and is thereby held against lateral movement, and when on the boot or shoe the skate is thereby prevented from becoming casually detached or unfastened.

K is a plate of circular or other form, which has a slot made in it of sufficient size to allow



the head of the T-shaped bolt to pass through it. This plate K is secured by two screws to the bottom of the sole of the boot or shoe, and is let into the sole, so that its under surface will be flush with it, and a recess, *j*, is made in the bottom of the sole of the boot or shoe to admit of the head of the T-shaped bolt being turned in it after being passed through the slot in the plate.

The manner of putting on the skate is as follows: The back part of the skate is of course first secured to the heel of the boot or shoe, and this is accomplished by holding the skate in an inclined position, as shown in red in Fig. 1, and passing the end of the hook first through the outermost slot *c* of plate G, and then turning the skate forward toward the sole to let the point of the hook pass down through the outermost slot *c'*, at the same time the head of the T-shaped bolt being turned so as to extend in a longitudinal direction or parallel with the runner, enters the slot in the plate K, and when the sole-plate is against the sole of the boot or shoe by a quarter-turn of the lever, or from a position shown in red to that in black in Fig. 2, a corresponding movement being imparted to the bolt, the operation is complete and a perfect fastening obtained. The inclined surfaces of the head of the T-shaped bolt *I* as it is turned in the recess in the sole of the boot or shoe act as a wedge or screw against the inner face of the plate K to draw the sole-plate firmly against the sole of the boot or shoe. The T-shaped bolt holds the skate against lateral movement and clamps it firmly to the sole of the boot or shoe, while it is secured vertically to the boot or shoe at the back part, and is also prevented from moving or shoving either longitudinally or vertically by the hook F, thus making a perfect lock.

I would remark that in lieu of the double-slotted plate G a single plate or bar may be employed and attached to the boot-heel, with a recess made in the heel directly under said plate or bar for the hook F to pass over. In

Figs. 3 and 4, which represent a modification of my invention, L is a latch-plate fitted to slide in a clip, M, and provided on its inner side with a knee-shaped projection (shown in dotted lines in Fig. 3) which protrudes through and has longitudinal movement in a slot in the sole-plate H of the skate. The front end of the latch-plate is connected by a pivot, *i*, with a bell-crank-shaped lever, J', which is attached to the sole-plate H by a pivot-screw, *k*.

The operation of this fastening will readily be seen. By turning the front end of the lever J to one side the knee-shaped projection will be drawn against the front end of the slot in the sole-plate. The skate is then put on in the same manner as the one first described, and locked by a movement of the lever J, which forces the knee-shaped projection toward the back end of the slot in the sole-plate, its inclined under surface resting against the inner face of the circular plate K' as the projection is forced back, acting to draw the sole-plate of the skate firmly against the sole of the boot or shoe. This last mode of fastening the front part of the skate to the sole of the boot or shoe might be used instead of the mode first described, though it is evident it would not be so safe or reliable a fastening.

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

1. The hook F and plate G, employed in the manner described, in combination with a T or hook shaped sole-fastening operated by a lever, J or J', substantially as set forth.

2. The T-shaped bolt I, sole-plate H, and lever J', in combination with the pins or screws *h h'*, or their equivalents, and ridge *n*, when arranged to operate in the manner and for the purpose set forth.

DAVID MAYDOLE.

Witnesses:

JAMES N. GRIDLEY,  
OCTAVIUS KNIGHT.